e Minima Donnal,

AND COMMERCIA

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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No. 2051.—Vol. XLIV.

LONDON, SATURDAY, DECEMBER 12, 1874.

SUPPLEMENT. SPRICE SIXPENCE. PER ANNUM, BY POST, £1 44.

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Appeal. Business in shares not having a general market value.

SPECIAL DEALINGS in the following. Buyers or Sellers will find it advantage us to communicate:— Glaisdale Quarry. Palmer's Shipbuilding.

n to communicate: Bampfylde. Bilson and Crump. Rikon and Crum Cardiff and Swar Chapel House. Cedar Creek. Clee Hill. Ebbw Vale. Flagstaff. Fronting.

Glaisdale Quarry.
Grogwinion.
Last Chance.
Newcastle Chemical.
Newport Abercarn.
New Sharlston.
Parys Mountain.
Prince of Wales.
Positive Assurance.

Paimer's Snippulic Peevor. Silkstone Fall. Sweetland Creek. Thorp's Gawber. Van Consols. Welsh Freehold. Whitehaven. West Tankerville.

Business transacted in all descriptions of MISCELLANEOUS shares. Bankers: City Bank, London; South Cornwall Bank, St. Austell.

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Miscellanceus Shares, and all Securities dealt in on the London Stock Exchange
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Stocks and Shares. Speculative Accounts opened for the Fortnightly Settlement.
A Stock and Share List forwarded to bona fide Investors free on application.
Bankers: The National Provincial Bank of England, E.C.

Bankers: The National Provincial Bank of England, E.C.

W. H. B. has SPECIAL BUSINESS in the undermentioned:
10 Great Laxey, £11½.
1

MR. E. J. BARTLETT, STOCK AND SHARE DEALER,
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PARYS MOUNTAIN.
SOUTH CONDURROW.
OLD TALARGOCH.

MINERA (Buyer).
PRINCE PATRICK.
SOUTH TOLCANDE.
CARN BREA SHARES.

JOHN RISLEY (SWORN), STOCK AND SHARE BROKER,

Turkish Six Per Cents. of 1854, 1858, 1862, 1865, 1871, and 1873 specially reconcended; Wheal Grenville and Treleigh Wood, also Wheal Peevor and Creb

nares. Business transacted at the following rates of commission :—Foreign Stocks, ½ per sub.; and Mining Shares of £4 each and upwards, 1½ per cent.; under £4, is

RERDINAND R. KIRK, STOCK BROKER, 5, BIRCHIN LANE, E.C.
Consols, Foreign Bonds, Railways, and every security quoted on 'Change bough and sold. Fortnightly accounts opened.
Bankers: London and Westminster, and City Bank.

BPECIAL BUSINESS in the following:—
Bagnall John.
Bilson and Crump.
Bilson and Crump.
Birdseye.
Cardiff and Swansea,
Cardiff and Swansea,
Flagstaff.
Glaisdalc Quarry.
Frontino. Bagnall John. Bilson and Crump. Birdseye. Cardiff and Swansea. Cedar Creek. Central Swedish. Chapel House. Chillington Iron. Clee Hill. Darlington Iron. Denton Colliery. Devon Consols.

Glaisdale Quarry.
Frontino.
Gt. Western Colliery.
Gold Run.
Hopkins Gilkes.
Javali.
Nant-y-Glo. Newport Abercarn. Original Hartlepool.

Pennerley,
Palmer's Shipbuilding.
Pelsail Coal.
New Sharlstone.
Sheepbridge
Silkstone Fall.
Silkstone Fall.
Silkstone Dodworth.
Sweetland.
Thorp's Gawber.
Tyllwyd.
Welsh Freehold.
Whitehaven Iron.

M R . W I L L I A M W A

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MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C.,
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R. WM .MARLBOROUGH, STOCK AND SHAREDEALER, 29, BISHOPSGATE STREET WITHIN, LONDON, E.C. (Established 18 years.)

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20 Chapel House, £4.

100 Javall, 5s. 3d.

101 Tankerville, £7 7s.

50 Parys Mountain, 10s.

50 West Basset. £7%.

50 W. Esgair Lie, £1 163.

50 Wheal Kitty, £4%.

15 East Lovell, £8½. 35 Eberhardt, £5½. 30 Emma, 18s. 9d. 50 East Chiverton, 25s. 50 Exchequer Gold. 45 Flagstaff, 38s. 9d. 100 Frontino, 8s. 9d. 45 Glaisdale Quarry. 100 Gold Run, 10s. 9d.

BPECIAL BUSINESS in the following:

40 Bampfylde, 44s.

5 Belavista, offer wntd.

20 Bilson & Crump.

30 Birdseye, 52s. 6d.

50 Bog, 6s.

50 Burrow and Butson, offer wanted.

50 Cardiff and Swansea, £2 2s. 6d.

70 Cardiff and Swansea, £2 3s. 6d.

60 Cleapel House Coll., £3 18s. 9d.

70 Chanpel House Coll., £3 18s. 9d.

70 Chotacles, 13s., 6d.

60 Clee Hill Col., 8s. 3d.

60 Devon Great Con., 48s.

55 Dan Pedro, 8s

55 Dan Pedro, 8s

55 East Lovell, £34s.

55 Eberhardt, £55s.

50 Exchequer Gold.

50 Exchequer Gold.

50 Exchequer Gold.

50 Roman Gravels, £12s. 18s.

50 Bennan, 18s. 9d.

50 Eschequer Gold.

50 Roman Gravels, £12s. 18s.

50 Coman Gravels, £12s. 18s.

130 Port Philip. 30 Roman Gravels, £12% 500 Rossa Grande, 1s. 3d. 75 Rica, 7s. 6d. 25 Richmond, £6%. kers: London and Westminst

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Carn Brea.
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Chontales
Devon Great Consols
Dolcoath

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M. R. E. CHARTE CHARING CROSS 1NG SHARES, free of com 20 Almada, 13s. 8d. 25 Bampfylde, £2. 70 Bog, 4s. 6d. 20 Birdseye Creek, £23/6. 3 Carn Brea, £52. 50 Cedar Creek, £11/4. 10 Cardiff & Bwan. £41/4. 50 Cathedral, 17s. 8d. 3 Dolcoath, £47. 70 Emma, £1. 10 East Lovell, £91/2.

3 Dolcoath, £47.
70 Emma, £1.
10 East Lovell, £9½.
30 East Grenville, 7s. 6d.
50 East Basset, £11.
50 Flagstaff, £2.
10 Great Laxey, £11.
30 Glasgow Caradon, £1½
40 Green Hurth, £6.

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10 Last Chance, 18s, 9d, 50 Lovel, 19s, 6d, 70 Marke Valley, £156, 50 Mid-Moonta, £8, 10 Minern, £23, 80 Malabar, 11s, 9d, 40 Malpaso, 18s, 9d, 80 Medlyn Moor, £3, 30 New Quebrada, £3½, 70 New Pacific, 8s, 6d, 25 New Sharlston, £10, 50 Old Treburgett, 12s 6d, 50 Plynlimmon, 3s, 6d, 60 Pennerley, £136, 50 Pedn-an drea, £7½, 80 Rica, 7s, 6d,

20 Russia Copper, £2½.
20 Roman Gravels, £12½.
80 Rossa Grande, 9d.
40 Sierra Buttes, £2½.
50 South Aurora, 9s. 6d.
25 So. Roman Gra., 12s 6d.
20 Tankerville, £7½.
8 Thornhill Reef, 10s.
50 Tecoma, £1½.
20 Van Consols, £2½.
50 West Maria, 6s. 9d.
10 West Basset, £7½.
10 Wheal Kitty, £4½.
25 W. Tankerville, 11s 6d.
10 Wheal Crebor, 18s. 9d.
40 Wheal Crebor, 18s. 9d.
40 Wh. Greenville, £5.

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100 South Aurora, 11e. 9d.
20 South Condurrow.
25 S. Prince Patrick, 42s 6
60 So. Rom. Gravels, 15s.
60 South Tolcarne, off. w.
30 Sweetland, 58s. 6d.
45 Thornhill Reef, 9s. 9d.
45 Thorp's Gawber, £15
45 Tecoma, 26s. 3d.
50 Tyilwyd, 20s.
25 Tankerville, £7 11s 3d
4 Tincroft, £2s.
50 United Bituminous.
55 Van Consols, 46s.
30 W. Tankerville, 8s.
30 W. Tankerville, 8s.
30 W. Great Work, off w.
30 West Gorland.
25 Wheal Grenville.
10 Wheal Kitty, £5.
10 West Chiverton, 38s.
20 Wheal Peevor.
25 Whitehaven Iron.
20 Welsh Freehold, £3.

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Pacific.
Malabar.
West Eagair Lie.

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FIRST PRINCIPLES OF CHEMISTRY.

Dr. Frankland, in delivering his fifth lecture on "The First Principles of Chemistry," said:—I intend this evening to take up another of those elements with which we became acquainted—Oxygen—and study it more in detail. It has been described as the most important of all the elementary substances known to chemists. of its importance in nature you can form some idea when you remember that it forms eight out of every nine parts by weight of water, and one-fifth of the air we breathe, and it is calculated that water, and one-first of the survey of earthe, and it is calculated that one-third of the crust of the earth consists of this substance. It is essentially necessary for the processes of combustion, respiration, to animal and vegetable life, as ordinarily carried on. For these processes it is essential also that the oxygen be free—that is, not combined with other elements. It has been calculated that if among the constituents of the globe there had been 1-2,000,000th part less oxygen none of it would have existed in the free condition, all would oxygen none of it would have existed in the free condition, all would have been in combination. Although oxygen enters so largely into the composition of the atmosphere it is not possible to extract it the composition of the atmosphere it is not possible to extract it therefrom in a direct manner and in a pure condition, but there are several indirect methods. There is one which is historically interesting, as being the process by which oxygen was first discovered. If you heat mercury for several days or weeks to a temperature not much below its boiling point, it absorbs oxygen from the air, and forms an orange-coloured compound, known as the oxide of mercury, and containing one atom of oxygen and one of mercury. Then, if and containing one atom of oxygen and one of mercury. Then, if this compound is heated (as we are doing in this glass tube) to a temperature slightly above that at which it was formed, the oxygen is given off again, and the mercury is set free: this method, of course, is never used for the preparation of large quantities of oxygen. There is another substance, called the black oxide of manganese, the same substance we may loved in the preparation of objects. course, is never used for the preparation of large quantities of oxygen. There is another substance, called the black oxide of manganese—the same substance we employed in the preparation of chlorine—which when heated strongly gives up one-third of its oxygen; and this method was at one time extensively used, the oxide being heated to redness in iron retorts. There is another process for generating oxygen which is largely employed in nature, but which we could not use to prepare the oxygen for our experiments, and that is the decomposition of the carbonic acid in the atmosphere (a small quantity being always present) by the green parts of plants. A molecule of carbonic acid is built up of one atom of carbon and two atoms of oxygen; the vegetable siezes hold of it, decomposes it, makes use of the carbon to build up its own structure, and sets free the oxygen. In this way not only have all living vegetables been built up, but also all the vast accumulations of coals have been formed and stored up. You can ascertain from the fact of the decomposition of carbonic acid by plants very readily, especially in the country; take some leaves (sprigs of mint answer well), and place them in a tumbler of water, then invert the tumbler into a basin of water, and let the whole stand for some time in the light. Bubbles of gas will form and rise to the top of the tumbler, and when you have collected a sufficient quantity you can easily prove that it is pure oxygen. Another method of repearing oxygen of the carbon of the preparing oxygen. when you have collected a sufficient quantity you can easily prove that it is pure oxygen. Another method of preparing oxygen, of more general application than any of the preceding, is from chlorate more general application than any of the preceding, is from chlorate of potash. This salt is now largely manufactured for the purposes of the lucifer match manufacturer: it consists of one atom of chlorine, one of potassium, and three of oxygen. When the substance is heated it melts, and gives off all its oxygen, leaving behind only the potassium and chlorine, which combine to form the chloride of potassium. Chemists, however, have improved on this process, for it is found that by adding to the chlorate of potash about one-tenth of its weight of black oxide of manganese—or iron rust, or almost any metallic oxide—that the oxygen comes off far more readily, and at a much lower temperature. The manganic oxide, although readily combined with a large quantity of oxygen, is able to combine with a still greater proportion, but it cannot retain this extra oxygen at a temperature anything like a red heat. Still it endeavours to combine with it, and its endeavour to do so causes the chlorate of potash to break up at a lower temperature than it otherwise would do. This is the method which is most commonly employed by chemists for the preparation of oxygen.

This is the method which is most commonly employed by chemists for the preparation of oxygen.

There is still one more method, which is interesting in its nature, but not so well adapted as the last for preparing large quantities of oxygen. This method depends upon availing ourselves of those slight affinities of which we had an example in Deacon's method for preparing chlorine. We take a little oxide of cobalt in a solution containing potash, and pass through this solution, at a temperature of about boiling water, a stream of chlorine. We decomposed steam by chlorine, you will remember, but then we required a white heat. In the present method the chlorine has a tendency to lay hold of the hydrogen of the water, while the cobalt has a tendency to combine with the greater quantity of oxygen, which, however, it cannot retain. The result of these two affinities is to decompose the water, hydrochloric acid is formed, while oxygen is given off.

Oxygen is sparingly soluble in water; it requires 100 cubic inches of water to dissolve 3 cubic inches of oxygen. Nevertheless, in spite of this small solubility, it is on the presence of the oxygen dissolved in the water that fish and marine animals are able to exist, since by their nature they are onlyadapted to breathe this dissolved oxygen. There is a very important question as to the sewage of towns turned into rivers, which bears upon this dissolved oxygen and fish life. This sewage undergoes putrefaction, and in that condition absorbs the oxygen dissolved in the water, thus rendering it incapable of supporting life; and in these rivers the fish (which you may sometimes see coming to the surface to breath) are either killed or driven further down the stream. It is not the fact, as has been stated, that sewage in any condition will destroy fish; the fact is that fish can live quite well in fresh sewage, but it is only when putrefaction commences that this injurious influence is exerted, and then it is by the withdrawal of the oxygen. The water pumped up from some mines tains iron, as protoxide, in combination with carbonic acid, in contact with the air, it absorbs oxygen, and is converted into peroxide of iron: this turned into rivers or brooks abstracts from the water that constituent of its dissolved air which is absolutely essential for the support of life. The chemical affinities of oxygen are very great; it combines with every known element except fluorine. With most substances its combination is attended with evolution of heat, and frequently also vivid light: all substances which burn in atmospheric air burn much more readily and brilliantly in oxygen—as experimental examples, phosphorus, sulphur, and even steel wire. On burning in the atmosphere the oxygen is clogged, as it were, by the inert nitrogen, which, as you know, forms four-fifths of the atmosphere, which exerts a cooling effect, and reduces the temperathe nert attrogen, which, as you know, forms four-fifths of the atmosphere, which exerts a cooling effect, and reduces the temperature. A jet of hydrogen burning in the air gives out no light, but has a high temperature; if we supply a stream of pure oxygen to this flame we scarcely add anything to its lighting properties, but add immensely to its heating effects; and you will see by means of this flame we are able to fuse platinum, the most refractory of the metals. If we allow the flame to play upon some body upon which it cannot act—a cylinder of lime, for instance—the lime is intensely ignited, and gives out a brilliant white light: this is, in fact, the combination which is known as the lime light. It is not in all cases necessary to supply heat to a body to cause it to combine with cases necessary to supply heat to a body to cause it to combine with oxygen, as we have hitherto had to do. Here in this sealed tube I have a transparent liquid, looking much like water, but when I break the tube, and allow the liquid to come into contact with the

air, it inflames immediately; it is a compound of zinc, of carbon,

air, it inflames immediately; it is a compound of zinc, of carbon, and of hydrogen.

Most of the oils used in the arts for greasing machinery and such purposes have the property of combining with oxygen at ordinary temperatures. In ordinary cases you never notice this at all; the temperature of the oil is very little raised, because the process is spread over a long time. After a time the oil becomes converted into a resinous kind of body. Yet in all such cases the same amount of heat is given out altogether as would be given out if the combination took place suddenly and at once. Now, suppose you immensely extend the surface of your oil, the process of oxidation will go on very much more rapidly, and this takes place when you accumulate heaps of tow or cotton waste, which has been used for wiping machinery, and which consequently has a film of oil spread over it. By the oxidation of this oil in the interior of such a heap heat is developed, and this heat can only pass away very slowly, the cotton waste all around being a bad conductor of heat. The temperature consequently rises, and this rise of temperature promotes still further oxidation, heat is more rapidly developed and accumulated, and it may eventually rise high enough to inflame the oil, and thus many factories have been burnt down. Again, there is a substance in coal—the brassy looking substance which is known as iron pryites, a sulphuret of iron—which readily oxidises in the air, producing heat. Under ordinary circulations, where air has free circulations. a sulphuret of iron—which readily oxidises in the air, producing heat. Under ordinary circumstances, where air has free circulation among the coal, the heat is dissipated, and the rise of temperature among the coal, the heat is dissipated, and the rise of temperature scarcely noticeable. But in cases where the coal is closely packed away, as in the hold of a ship, in large quantity, the temperature may be raised to the igniting point of coal, and a fire started. There is another curious instance of this oxidation at ordinary temperatures, and it is very important to bear these facts in mind. One of the earliest telegraph cables was coiled up in a ship which was transporting it down the Thames. The outer coating of the cable was of thick iron wires, and as these were exposed to the moisture and air oxidation set in, and the temperature rose; it was fortunately discovered in time, and water was instantly poured over it, and

nately discovered in time, and water was instantly poured over it, and now the precaution is taken of coiling such cables in tanks of water. Although oxygen as present in the atmosphere as essential to animal life, still under certain conditions it may be absolutely poisonous. If oxygen be compressed so as to force 3½ ft. at ordinary pressure into 1 ft., an animal introduced into such gas becomes suddenly conversed and soon dies: if the compression is five into one denly convulsed, and soon dies; if the compression is five into one the animal falls down dead immediately. If air be so compressed it is found that like effects occur at 7 and 22 atmospheres respectively. These facts ought to be remembered now that it is the plan sometimes to have workmen engaged in compressed air, though at comparatively low pressures there used, the greatest danger to be feared is the sudden passage of the men from air at one density to feared is the sudden passage of the men from air at one density to

air at the other.

We have still to consider oxygen under another form, in which air at the other.

We have still to consider oxygen under another form, in which the properties are remarkably altered—under the form which the chemist calls "azone." The chemist believes that in the molecule of ordinary oxygen there are only two atoms, but his experiments show that in this "allotropic" form of oxygen three atoms of oxygen are condensed into the molecule—that is, you have half as much more oxygen occupying the same volume as before. This has been proved by means of the property which spirits of turpentine has of dissolving the azone out of a mixture of azone and oxygen. Azone may be prepared by placing sticks of phosphorus in a flask, and partly covering them with water; or, better still, by passing electric sparks through air or oxygen. The odour usually perceived when electric sparks pass through air is due to the formation of ozone, as is also the popularly called "sulphurous odour" which is observed when a building is struck with lightning. The presence of azone is proved by allowing it to act on a substance containing iodine in the presence of starch; it liberates the iodine, and this acts on the starch, producing a deep violet colour. Here is a solution of potassic iodide, thickened with starch, which we use. Ozone has a very powerful action, it is even capable of oxidising silver, which, as you know, is very permanent in the air; it is also a powerful bleaching agent. It acts powerfully on india rubber, hence we cannot use tubes of that material in transmitting it. Some persons believe that the presence of azone in the air contributes a great deal towards its wholesomeness, and they ascribe the good effect of the sea-side air to the presence of the azone which is always found in it.

AIR AS FUEL.

As the constituents of air are very generally known to be under every possible condition incombustible, although it is an excellent supporter of combustion, the suggestion to employ air as fuel will

every possible condition incombustible, although it is an excellent supporter of combustion, the suggestion to employ air as fuel will at once be acknowledged as a startling and sensational proposition; yet in discussing it Mr. Owen Ross, M.I.C.E.,* has succeeded in introducing a large amount of information relating to the use of mineral oils as fuel, which will be interesting to a great number of readers. He reminds us that the experiments of St. Claire Deville and Dieudonne, reported to the French Academy of Sciences, showed that I lb. of petroleum was capable of evaporating about 11 lbs. of water, whilst in subsequent experiments at Woolwich the average evaporation was 13°2 lbs. of water per 1 lb. of oil, but the range of variation was from 71°4 lbs. to 18°38 lbs., assaginst 8 lbs. which was obtained at the same time from the combustion of 1 lb. of coal. It was not then found that mineral oils could advantageously compete with coal, and cresoote, which was then ½d. per gallon, is now 4d. or 6d. per gallon.

It is not cresoote, however, that Mr. Ross proposes to use, but bituminous shale oils, and especially petroleum, employed in a state of vapour combined mechanically with air by means of an apparatus of a very simple description. He shows that the price of American petroleum has fallen in London from 24′4. in 1866 to 8′4. at the present time, and that the cost of shale oil in the Scotch works is now about 3½d. per gallon. No figures are given, but speaking generally Mr. Ross urges the coal since the experiments with liquid fuel were made at Woolwich, having enormously increased in price, and petroleum and shale oil having in a still greater proportion fallen in price, while they are now obtainable in incalculable abundance; the comparison between the two species of fuel no longer stands as it did in 1866, and if to this circumstance there can be added no doubt the economy must be found now for many purposes on the side of oil. He states that the intrinsic calorific power of such oils for evaporative or ste

may be obtained from them at much less cost, and with much greater convenience, than from coal.

After making some observations upon the principles which regulate the economy of fuel, including such curious statements as that it would be equally accurate, and lead to a clearer and more easy comprehension of the conditions under which heat can be most advantageously obtained, if we were to say that we burn air instead of saying that we burn wood or coal, he states that all mineral oils are susceptible of being as completely converted into vapour as water itself; he admits that chemists have ascertained that this is not the fact, but he thinks his process removes the difficulty. He proposes to use a low temperature to bring off the vapour from the oil, the result of which is well known to all chemists. His oriental control of the quantity of vapour obtainable at different densities need not be referred to, as their value can be judged of from the opinions upon which they are based. In a chapter on the superiority in calorific power and in thermal effect of petroleum and other hydro-carbon liquids over coal, Mr. Ross states that the temperature of a furnace heated by means of carburetted air would be very nearly double that obtainable with coal, for the simple reason that the products of combustion would be diminished to very little more than one-half of those which are produced by the combustion of coal. He gives the table showing the theoretical evaporative power of the different constituents of petroleum, and regards them as so many different qualities, and proposes the application of carburetted air to metallurgical processes, to occan steamships, ships of the navy, for obtaining sulphur flour direct from theore, and to ordinary household purposes, &c., and the ntilisation of petroleum and other mineral oils for illuminating gas.

By way of recapitulation, Mr. Ross asserts that the calorific power of petroleum, as compared with coal, is theoretically more than double; but when burnt as thin vapour, mechanicall

""Air as Fuel; or Petroleum and other Mineral Oils Utilised by Carburetting Air and rendering it Inflammable." By Owen C. D. Ross, M.I.C.E. London: E. and F. N. Spon, Charing Cross.

it will practically generate four times as much steam at coal, owing to its being completely consumed, and to the diminution in volume of hot products which escape to the chimney. For high temperature furnaces, in which the products of combustion carry away 19-20ths of the heat generated by coal petroleum, has, in his opinion, an incalculable superiority, and increases the efficiency of a furnace as much as sixteenfold. He maintains that for all purposes requiring an even temperature for obtaining heat rapidly, and for household purposes, for the generature for obtaining heat rapidly, and for household purposes, for the generation of steam in marine bollers, whenever it is important to economise, and to substitute freight-paying merchandise for a large unproductive bulk of coal; for use in many foreign countries where coal is expensive, and for the production of illuminating gas, unquestionably petroleum and other mineral oils may be very advantageously substituted for coal, and would be more economical.

Taking the volume as a whole, it is very compact, and admirably printed, and contains an excellent outline of what has been done up printed.

printed, and contains an excellent outline of what has been done up to the present time to economise coal by the substitution of petro-leum and other mineral oils for it in the generation of steam, production of illuminating gas, and carrying on of many industrial operations; it will doubtless be read by many interested in lowering the price of coal by lessening the demand for it, as well as by those who recognise in liquid fuel the most desirable material for the development of heat and generation of steam.

GEOLOGY IN ITS RELATIONS TO THE ARTS AND MANUFACTURES.

The advantage of geological knowledge for the successful carrying on of many branches of industry has long been recognised, yet comparatively few of those engaged in business, or intending to devote themselves to business pursuits, care to give the time necessary for studying the subject upon strictly scientific principles. Relying upon this circumstance Prof. Page, LL.D., of the College of Physical Science, Newcastle-on-Tyne, has compiled an excellent volume* specially designed to meet the requirements of practical men. He has now given us a general treatise on annihild geology, which on has now given us a general treatise on applied geology, which em-braces all that is usually required by technical students, and furnishes an epitome of the information which has hitherto been obtainable

specially designed to meet the requirements of practical men. Has now given us a general treatise on applied geology, which embraces all that is usually required by technical students, and furnishes an epitome of the information which has hitherto been obtainable only with much labour from special works on building and decorative stones, mortars and cements, ores and metallurgy, and so on. Prof. Page very truly remarks that the field of industrial requirements is yearly extending, and in the multifarious industries of civilised life. A knowledge of these subcacount in the multifarious industries of civilised life. A knowledge of these subcacount in the multifarious industries of civilised life. A knowledge of these subcacount in the multifarious industries of civilised life. A knowledge of these subcacount in the multifarious industries of civilised life. A knowledge of the consequence of the civilised life and to be of use to those who have to deal with them, and some acquaintance with them in a general way are an all title fail to be of interest to the intelligent observer of that scientific invention and industrial skill which labour so assiduously to convert every product of Nature into objects of utility and ornament.

Referring to the practical value of geology, apart from its scientific interest, Prof. Page points out that as man advances in civilisation a knowledge of the composition of the contract of the

The general character of the volume is similar to that of all Prof. Page's works—strictly scientific and systematic, yet written in a style which makes it alike acceptable to the student and to the general reader. The amount of information given is enormous, and any particular subject upon which instruction is sought can be readily turned to by referring to the very copious index which the book contains. When necessary for the thorough elucidation of the statements made well executed engravings are given, and the whole is rendered complete by the addition of an excellent geological map of the United Kingdom and Ireland, properly coloured, and of ample size for reference. The value of the book will be very generally appreciated. preciated.

" "Economic Geology, or Geology in its Relations to the Arts and Manufactures."
By DAVID PAGE, LL.D., F.G.S., &c. Edinburgh and London: William Blackwood and Sons.

By DAVID PAGE, LL.D., F.G.S., &c. Edinburgh and London: William Blackwood and Sons.

POST OFFICE LONDON DIRECTORY.—With regard to most works originality in the character of the information given is, very properly, regarded as a merit entitling them to at least some amount of commendation, but in the case of the Post Office London Directory any alteration in the arrangement or in the information supplied would lessen the value of the volume; indeed, in stating that the seventy-sixth annual edition—that for the ensuing year—now is sued, is in every respect similar, and as well revised as usual, ample evidence is afforded that the Directory is as indispensable as ever to the man of business desirous of keeping his office properly supplied with absolute requisites. The number of new trades constantly springing into existence is observable in each successive edition, and in the present year no less than 23 have been added to the list, alizaring manufacturers, gas residual merchants, and such like, now finding a place in the "Trades Directory" under separate headings. In the "Street Directory" the renaming and re-numbering of streets, and the building and naming of new streets, are constantly going on in London, although we do not follow the example of the French in changing the dynasties periodically, and then altering the nomenclature of the streets to suit the incoming party, for it appears that within the jurisdiction of the Metropolitan Board of Works 15 streets have during the present year been renamed, 34 have been re-numbered, and 45 names of new streets have been introduced. Owing to these constant additions in the various portions of the Directory the volume now reaches the enormous size of 2934 pages, although but a few years since the size of the type was reduced, and every effort at compression and years since the size of the type was reduced, and every effort at compression and control to the second of the present year has been particularly barrent in alterations of an important character, yet upon a pe

THE DEEPEST SHAFT IN THE WORLD.—The deepest mining shaft in the world is said to be that of the colliery of St. Gilly Chatilineau, three miles from Charlerei, Belgium, which is 860 metres in depth (940% yards). The deepest coal pit in England is that of the Rosebridge Colliery in the Wigan district, being coal pit in England is that of the Rosebridge Colliery in the Wigan district, being coal pit in England is that of the Rosebridge Colliery in the Wigan district, being coal being worked. Sl5 yards deep, and 16 ft. in diameter. There are four seams of coal being worked. The Wigan 5 ft., at 450 yards; Wigan 4 ft., at 470 yards; the yard coal, at 680 yards; The Wigan 5 ft., at 450 yards; The ventilation of the pit is by a furnace, and is very and the Arley, at 800 yards.

SUCCESSFUL LEAD MINING IN WALES.

In the midst of the chilling fogs and cloudy skies that at this period of the year darken alike the commercial and the terrestrial horizons, it is satisfactory to be able to turn our eyes in at all events one direction, and to note that those clouds have bright and silvery one direction, and to note that those clouds have bright and silvery linings which give promise of sunnier days in a not far distant financial future. The pleasant prospect we refer to, and to which we can direct attention without hesitation or misgiving, lies in the direction of that vast field of Welsh lead mining enterprise now being developed in the rich districts of Cardiganshire and Montgomeryshire. The condition and prospects of the Welsh mining interests in these counties especially are not merely to be described as hopeful and encouraging, but are so unquestionably good and certain that those who a short time since had the wisdom and courage to look beyond the mists that then partially enveloped this branch of inthose who a since time since in the wisdom and colorage to look beyond the mists that then partially enveloped this branch of industry, and laid out their money accordingly, may well look around and congratulate themselves on their foresight and sagacity. The reports from the Metal Markets tell us that the present price of lead is higher than it has been for a long period, some of the best brands having been quoted at 241, 10s, per ton, and the demand continues unabated. Mr. Robert Hunt, the official Keeper of Mining times unabated. Mr. Robert Hunt, the official Keeper of Mining Records, states in his annual report, just published, that the amount of lead raised from British mines last year was no less than 73,500 tons 10 cwts., realising 1,263,3754, for lead, and 131,0774, for silver, against 83,968 tons 3 cwts. of ore, realising 1,209,0154, for lead, and 157,2304. For silver in 1872, showing a decrease of 10,468 tons of ore, but an increase in value of 54,2604, thus exhibiting in a most unmistakeable manner the progressive increase in the value of lead ores, as the actual increase in value is thus proved to have been more than 12½ per cent, for the year 1873. The reasons for this agreeable state of things are happily not far to seek, and are not likely to cease in their operations for probably a very lengthened term of years. The primary explanation is, of course, to be discovered in the rapid rate at which the population of the British dominions is advancing, not primary explanation is, of course, to be discovered in the rapid rate at which the population of the British dominions is advancing, not only in numbers, but in apparently boundless wealth. Given, the people and the money—more houses follow, as a matter of course, and as the residences wherein the modern rich merchants, manufacturers, and bankers start in life resemble, and generally much surfacturers, and bankers start in life resemble, and generally much surfacturers, and bankers start in life resemble, and generally much surfacturers. pass, the mansions in which their grandfathers were content to finish pass, the manisons in which their granularies were content to infisit up their career of prosperity, there is naturally a far greater demand for lead for all the multitudinous appliances for which that us-ful and alily more valuable metal is brought into requisition. This is not, however, the only reason, as owing to the diminution of supplies, in consequence of the suspension of production by the Spanish mines which before the Carlist war sent considerable quantities to the English market, the demand for the metal has speedily increased, and there is still ample room for a further important rise in its market value. Amongst many other illustrations that will readily occur to the mind is the fact that builders, architects, and contractors have for the last two or three dozen years, in order to reduce their estimates, and thereby give them a better chance in the ever-growing competition in trade, been substituting zinc, slate, drain-tiles, and other cheap materials, for purposes in which in former times lead was almost invariably used and demanded. The end of this system, between it fast anywasching and consequently more lead is and was almost invariably used and demanded. The end of this system, however, is fast approaching, and consequently more lead is, and constantly will be, in demand. Hence it is that our mining friends in Wales are once more raising their songs of triumph from every mountain side, and in almost every valley in Cardigan and Montgomery the cheerful click of the jigger and the grinding of the crusher are again heard.

Foremost amongst the lead mining enterprises of this district must, of course, be mentioned the now celebrated Van Mine, sold a few years ago for 40,000L, under an order from the Court of Chancery, but which has since commanded a market value of about a million sterling. This property was first worked in 1849, but after two years abandoned. In 1869, however, it was taken in hand with a cipital of 60,000%, and since that time the 4% 5%, shares have frequently fetched 80% each in the open market! The amount of lead ore sold is from 450 to 500 tons per month (of 28 days), besides about 150 tons of blende, the value of the ore hitherto returned being about half a million sterling: 200,000% have already been paid in dividends, and it is estimated that the present rate of production will continue for at least another 25 years.

Amongst other first-class lead mines in Wales, hesides the wellbut which has since commanded a market value of about a million

will continue for at least another 25 years.

Amongst other first-class lead mines in Wales, besides the well-known Darrens, Lisburne, Powell Consols, Minera, Cwm Erin, Goginan, Roman Gravels, Tankerville, &c., are several new undertakings in the immediate neighbourhood of the Van property, one of the best of which, the Wye Valley Mine, has been recently acquired by a very influential company, and is now in full working, and lead is being cut out in large quantities. The company has quired by a very influential company, and is now in full working, and lead is being got out in large quantities. The company has been at work only about three months, yet they have already sampled a parcel of ore in that short time, and regular monthly sales will in future be made. A meeting of the principal shareholders, from all parts of the country, was lately held at the mine, when experiments were made upon the ore taken out of the mine in their presence, and the results, both as to the quality of the lead and the proportions of silver, were so highly satisfactory that everybody went away much pleased with the investigation. In fact, there is no apparent reason why this should not prove as good a property as the Van, near to which it is situated, and the lode now being worked is said by those who are well able to judge to be a continuation of the famous Van lode itself.

Another important new mine in the same famous district is the

Another important new mine in the same famous district is the Melindur Valley, at which the machinery is up and in full work. Lead of fine quality is raised here, and is being sold at remunerative prices. As the workings are carried further into the mountain sides lead will a few workings are carried further into the mountain sides prices. As the workings are carried further into the mountain sides lead will, of course, be produced in great quantities, with very little addition to the present expenditure. A main point of interest in this mine is the driving of a cross-cut in a northerly direction with the view of cutting the famous Cwm Erfin lode, which runs through the Melindur property, and which lode in the adjoining mine (Cwm Erfin) gave very large profits to the shareholders while worked under the management of the well-known firm of Messrs. John Taylor and Sons. As soon as this well-known rich lode is cut at Melindur Valley the success of the mine will be established, and the shareholders need have little anxiety about the future. It is estishareholders need have little anxiety about the future. It is estimated by local authorities who have resided in this district for many years that this great point may be achieved very soon. Both the Wye Valley and Melindur Valley properties were taken up a little more than a year ago by the firm of Messrs. H. Halford and Co., of 27, Lombard-street, London, who, in conjunction with their clients, provided the necessary capital in a few days, and they are now being vigorously worked with good results. The mine is worked by a company, whose capital is 33,000%, in 11,000 shares of 3%, each.

A new company has just been formed, called the Llanidloes Lead Mining Company (Limited) to purchase and work a mine situated about two miles from Llanidloes, and upon what is said to be the nearest parallel lode to the Van lode. This mine was extensively worked some years since, and a large quantity of lead was raised and sold, but after being profitably worked for some time it was given up. These services are the same time in the same time.

od. The deepest mine in Cornwall is Dolcoath, which is 360 fms.—720 yards. the Hartz Mountains there are several shafts more than 800 yards in depth—The gineer.

pality, and which bids fair to yield large profits for a great number of years. We allude to the Grogwinion Mine, situated a few miles from Aberystwith. This mine has been worked at different periods from Aberystwith. from Aberystwith. This mine has been worked at different periods for a great many years, but, notwithstanding that good returns were made, the work done had been entirely superficial until within the last 10 or 15 years, and really scientific and energetic developement was not commenced until about five years ago. At that time the mine was acquired by a well-known firm of brokers, who started active operations under the management of Captain John Kitto. Since that time a great deal has been done, the machinery and dressing-floors having been entirely renewed and reconstructed at a large outlay, and are now amongst the most compact and efficient in Cardiganshire; the whole of the dressing machinery being self-acting. The mine is situated on the River Ystwith, and has, consequently, a plentiful and never failing supply of water power with which to work all the machinery. The water-course is upwards of a mile in length, and was made at great cost to bring the water from a dam, which has been constructed at a large outlay right across the river, consequently few mines are so well off as this is in the possession of such an ample supply of cheap motive power.

The mine is about one square mile in extent. The mountain which forms it is about 900 ft. high from the bed of the River Ystwith, and all the workings are at present above the water level. The learn ground they had ever will take meny years to exhaust.

and all the workings are at present above the water level. The ore ground thus laid open will take many years to exhaust. The lead is expected to hold down to a great depth below the base of the mountain, as it does in other mines in the same district. A very important fact is that in the 12 fm. level below adit the No. 4 lode, which had not hitherto been productive, has recently been cut rich, and is now yielding good ore; this is of great importance, as at the point where it is being worked extensive backs are standing over head. where it is being worked extensive backs are standing over her which may hold good even up to the top of the mountain. As t workings are extended down wards this No. 4 lode will, of course, explored, and it is indeed another source of productiveness in a ldi-tion to the three lodes which have hitherto been, and now are, producing ample ore to pay all costs, and leave good profits. The plan of working now being pursued is to return only what ore can be obtained by fair and judicious working, and thus ample reserves are created to fall back upon when the development of the mine is further advanced. The manager is to be commended for this wise policy. There can be no doubt of the extent and permanent character of the deposits of lead, for the ore is visible in all the workings from the top of the mountain to the deposet levels. It would be no ter of the deposits of lead, for the ore is visible in all the workings from the top of the mountain to the deepest levels. It would be no difficult matter to raise and dress 100 to 200 tons of ore at any magent. The lodes have been fully proved in the shaft (900 feet above the river level), also in the shallow adit level, which is situated some 700 feet above the base of the mountain; they are being proved and yielding lead at the intermediate level, and ore is now being raised and dressed from the deep adit level, which is driven into the mountain at its base. This being so, there can be no doubt of the existence of the lead for the entire extent of the sett, and it now only remains for additional levels and shafts to be driven and sunk so as to facilitate the production of large quantities of lead sunk so as to facilitate the production of large quantities of lead without impoverishing the mine, and as the machinery is competent without impoverishing the mine, and as the machinery is competent to dress all that can be produced, time only is necessary to render Grogwinion one of the grandest of the many grand successes in Cardiganshire. Lead of splendid quality is now being sent to market at the rate of 50 tons per month. The price obtained in October for the ore, 14t. 5s., rose in November to 14t. 16s. per ton, with an upward market. This mine has already paid one dividend, and will pay another before Christmas, making two dividends in seven months. In a future article we intend directing attention to other important mines in the Principality.

IRON ORE REGIONS OF THE UNITED STATES-NO. I.

The constant extension of industrial enterprise in the United States, and the vastness of the American coal deposits, have naturally caused British ironmusters to regar! America as the country from which most active competition with English iron in the markets of the world is to be expected, and the abundance of the iron deposits, and their distribution throughout the various parts of the Union, certainly appear to justify that feeling. Full details of the chemical analyses of all the iron ores of the United States are not at present at disposal; indeed, such classification and analyses have never been thoroughly made, and are now proposed by a committee of the Lendon. thoroughly made, and are now proposed by a committee of the Iron and Steel Association for publication at the Centennial Exposition in 1876. The mineral wealth in iron of the United States has never in 1876. The interest wester in front of the United States has never been appreciated either at home or abroad, though it is claimed that at the present day no in one judicious or profitable investment of capital can be made in the world than in the iron ore lands of the United States. For centuries to come the abundance of ores cannot United States. For centuries to come the abundance of ores cannot be exhausted, nor that of the fuels to reduce them. At the present prices of iron—prices which for a series of years cannot under ordinary contingencies decline—there is a lucrative and legitimate business in the manufacture of pig-iron where the proper localities are selected, and the control of sufficient ore is secured. To the ore regions of the North-West and West, and especially to those of the Sauth and South-West as vet comparatively virgin regions must South and South-West, as yet comparatively virgin regions, must the future supply of cheap pig metal be looked for. Iron can be made in the southern portion of the United States, within easy distance of tide water and on canal communications, at a cost permitting of its being exported to Great Britain, and sold there with more profit than is to-day made from the manufacture of the same more profit than is to-day made from the manufacture of the same grade of metal in England. That this is not done is simply from the fact that the regions where cheap iron can be made have not been developed, but await capital to engage in the manufacture. The advantages presented at this juncture for investments in iron ore lands as a commercial speculation are generally overlooked. Scarcely a state or territory exist within the limits of the United States which has been at all developed but in which iron ores to a greater or less extent have been found, and almost invariably in contiguity to fuel and fluxes of character suitable for their successful and profitable reduction. able reduction.

No known variety of iron ore commercially used can be mentioned of which the counterpart has not been found in some section of the United States. The celebrated ores of Sweden are reproduced almost in facsimile of analysis by those of Central North Carolina, The blackband ores of Scotland are found in abundance in Ohio, and exist in greater or less quantity in Virginia and Alabama. The exist in greater or less quantity in Virginia and Alabama. The titaniferous ores of Norway, now profitably treated in Great Britain, are in abundant supply and of like characteristics in Northern New York and Virginia. The spathic ores for steel purposes are abundant in Connecticut and New York, while manganiferous ores for the manufacture of spiegeleisen are found in quantity in Missouri. The whole Lake Superior region of Michigan abounds with magnetic and hematite ores of the choicest character, while the iron mountains of Missouri, including the Iron Mountain proper, Pilot Knob, Shepherd Mountain, and others display deposits of ore unequalled in size and purity in the world. From the extreme eastern Atlantic coast in Maine, to the waters of the Pacific Ocean on the coasts of California and Oregon, ores of good merchantable character are to be found, and these extremes now meet each other in the production found, and these extremes now meet each other in the production of iron, both localities having furnaces at work or erecting for the reduction of their ores. Throughout the iron belt with all the off-shoots and sinussities of its course the blast-furnace is to be found. worked some years since, and a large quantity of lead was raised and sold, but after being profitably worked for some time it was given the principal shareholders, and as they could not agree to find capital for erecting more powerful machinery the works were stopped, and the mine has lain idle ever since. It is well known that at that period the bottom of the mine was looking more productive than at any previous time, and there is now in the ore kiln a lot of ore which was raised the very day the works stopped. This present company has decided to at once erect a powerful Cornish pumping engine to unwater the mine, and when this is accomplished there is no doubt whatever that good parcels of lead ore can be raised. The works on the surface are capitally laid out, and cost the old company a great deal of money, and the new proprietors will reap the benefit of this at a very moderate cost. The lead is of fine quality, and easily worked, and will, no doubt, prove very profitable.

Before concluding we must not omit to notice what is now proving to be one of the finest properties ever known in the Princi-

Commencing with the iron ore regions of Alabama, and the ex-remely valuable coal fields of that State, it is remarked that a careful investigation of the subject confirms the opinion that it is extremely doubtful if any section of the United States offers greater conjunction of the necessary materials of ore, flux, and fuel for the tremely doubtful if any section of the United States offers greater conjunction of the necessary materials of ore, flux, and fuel for the successful production of pig metal of a good quality than the belt running from Maryland on the north through Virginia, Georgia, Tennessee, and Alabama. Writing from a standpoint entirely unaffected by interests, it is evident, that there is and must be in the near future a demand for iron in the world which shall give ample returns for the capital invested in all the iron ore regions of the United States; and the argument that any one of the older sites of iron production, where ores have to be brought from various sections at high freights to furnish the only proper admixture, should have any advantage save that of facility of obtaining capital and labour is puerile and unworthy of the patriotic people of a country so lavishly endowed by nature with mineral wealth as the United States. The principal iron ores of the State have been examined, and numerous deposits added to those already known. The red, or fossiliferous, ore is now known to extend almost without interruption from a point 2½ miles below Pratt's Ferry, in Bibb county, to the upper end of Will's Valley, Do Kalb county; on the west it runs up to Murphree's Valley. The thickness is variable, being in some localities 20 ft. to 30 ft., and in others thinning down to 1 ft. The analyses given show the ore to be of excellent quality, and of good percentage for metallic iron. One analysis gives—peroxide of iron, 7364; sesquioxide of manganese, 2.57; aluminia, 1.41; copper and phosphoric acid, each a trace; water, 9.77; insoluble matter, 15.49 = 100.44; metallic iron 51.55 per cent. The mineral lands of the Red Mountain iron region lie in Shelby and Jefferson counties from 3 to 15 miles south of Elyton, the county town of the latter. Shade's Mountain, Red Mountain, and several smaller elevations, with a general direction parallel to the Cahawba river, and lying on each side of it were formed by volcanic action, which lif side of it were formed by volcanic action, which lifted up the strati-fied crust of the earth from south-east towards the north-west. The strata dip to the south-east at an angle of about 35°, and the ascent strata dip to the south-east at an angle of about 35°, and the ascent of the hills from that side is very gradual, being generally less than the dip of the strata from the accumulation of soil in the valleys and on the slopes. On the north-western side the strata are broken, and the ascent is generally precipitous, rising in some places to several hundred feet above the valleys. These valleys are generally level, and all the ranges are frequently intersected by gaps, through which roads, either turnpike or rail, can be made with much less difficulty than is usually met with in broken countries. The coal is bituminous, and varies in quality in the different localities. On the lands over which the South and North R ulroad is running, near where Back Creek empties into the Cabawba river, 17 veins have been discovered, eight of which are from 2 ft. to 4 ft. thick, outeropping on and underlying these lands for miles. No one as yet seems able to a nijecture the extent of the deposits. Some as yet seems able to conjecture the extent of the deposits. Some of the veins have been worked to a limited extent, and coal in considerable quantities is now being mined from the same veins at the Schawba coal mines on adjoining lands. This coal is shipped by the South and North Railroad to Limekiln on the Selma, Rome, and Dalton Ruilroad, and thence to Selma, Mobile, Montgomery, and other points. It is well adapted to smelting iron, and it is no ex-aggeration to say that the supply is inexhaustible. A few miles to the north of the coal fields is the iron stratum of Red Mountain; the the north of the coal fields is the iron stratum of Red Mountain; the ore is red hematite, and the iron made from it is pronounced by competent judges to be equal to any made from ore of that description in any part of the world. A heavy stratum of limestone, containing nearly all qualities of limestone from marble downwards, underlies the stratum of iron ore, and outcrops a few hundred feet higher up Red Mountain. The coal reg ons of Alabama occupy the north east corner of the State, and extend in a south-west direction about 160 miles into the State. On the eastern side, and in its middle part it measures north and south 90 miles, and in its middle part it measures north and south. The total area in the State of Alabama of the three coal fields is 4000 square miles, and the coal is entitled to rank in the first-class of fuel for producing steam.

MANAGEMENT OF MINES IN PRUSSIA.

MANAGEMENT OF MINES IN PRUSSIA.

The Secretary of State for Foreign Affairs having applied to the Diplomatic Representative at Burlin, has received particulars relative to the general management of mines in Prussia, and also respecting the Government mines. The Prussian Minister of Commerce, firstle, and Public Works is at the head of the Prussian Administration of Mones, which forms the first of the five departments of the Ministry of Commerce, founded in 1848. The department of mines, furnaces, and salines is placed under a Chief Director of Mines as represented by a threefold system of control, according to the general mining law of Prussia of June 24, 1865, by the district Inspectors, the superior mining boards, and the Minister of Commence. To the provisions of this law private mines, as well as mines purchased and worked on Government account, are subject.

To the competence and authority of the Minister belong especially the preparation, so far as regards co-operation in the Legislature, and publication of general administrative directions in aid of such

the preparation so far as regards co-operation in the Legislature, and publication of general administrative directions in aid of such undertakings; the exercise of the Government authority, in the highest instance, as regards the search for and obtaining of mineral products excluded from the proprietors' rights of disposal (leasing of mining property, giving up of ground and soil to mining objects, &c.), and the police supervision of mines, subject to the provisions of the above-mentioned law. The Minister also has the appointment of the district Inspectors; the control of the imposition and collecting of the mining dues, subject to the dispositions of the law; and the superior administration and management of all Treasury or Government mines, furnaces, and salines, as well as of diggings for and the superior administration and management of all Treasury or Government mines, furnaces, and salines, as well as of diggings for phosphorite, gypsum, and chalk pits, so far as they are worked on Government account, and from their extent demand a technical supervision. On the other hand, in matters of mining police, and as regards the discipline of the officials, the Government mine administrations are put under the control, in the first instance, of the superior mining board of the district in which they are situate. The Minister further has the management of the technical works on Government account for geognostic surveying; of the scientific, cartographic, and literary works in the general interests of mining industry; of the higher schools of mining, and the care of collections in this branch; and the supervision of the education of those employed in the higher branches of mining engineering. The police ployed in the higher branches of mining engineering. The police inspection of private furnaces was, by law of June 10, 1861, given over to the Tribunals of Commerce, and, therefore, belongs at pre-sent to the competence of the fourth department of the Ministry

of Commerce.

The district Inspectors exercise, as individual officials, the police ontrol of the mines in their district, which in accordance with the above-mentioned laws, extends to the safety of the workings, of the life and health of the miners, the care of the upper surface in the interests of the personal safety and public traffic, and to precautions to be taken against influences generally injurious. Moreover, the Inspectors are the agents of the superior mining boards, of which there are five—at Berlin, Halle, Dortmund, Bonn, and Clausthal, in all questions respecting bases every parisions tayes, labour. which there are nive—at Berlin, fifthe, Borthuldi, Sond, and Clausthal, in all questions respecting leases, expropriations, taxes, labour, &c. The local administrations of each of the Government establishments are organised on the directoral principle under various demominations, inspection of mines, forge and salt mine superintending boards. The inspection of the Government coal mines is subject to the control of a mining board at Saarbrück. The local mining police, as regards the Government establishments, is exercised either but the regular district Impressor on by the mining superintendent. by the regular district Inspector, or by the mining superintendent, so far as the competence of the district Inspector is given by the Minister of Commerce to the latter. The technical management and economy of the mines is conducted, independently of the local and economy of the mines is conducted, independently of the local superintending Inspectors, under the direct management and control of the Ministry. The yearly salary of the Inspectors varies from 120l. to 225l., and averages about 172l. 10s.; besides, these officers receive fees for examining boilers, payment of travelling and office expenses, and allowance for house rent. The yearly pay of

the mining superintendent varies from 180% to 300%, with house free and office expenses paid.

The Government administers its coal and metal mines through the above-mentioned mining officials (mining board directors and mining superintendents), on account of its own Treasury. The Crown of Prussia does not own any property of this kind. The Government mines are not, as a principle, let on lease, and when in isolated cases certain bits of the Government seams or veins have been let to other parties they are only most in-ignificant lots, which on account of their unsuitable position cannot conveniently and properly be worked on Government account. The rent is then based on the measuring unit of the gross produce, a yearly minimum of production being

on government account. The rent is then based on the measuring unit of the gross produce, a yearly minimum of production being fixed for that purpose. Private mines in Prussia are subject to a special tax on the sale of the raw produce. This amounts to 2 per cent, on the gross receipts.—Capital and Labour.

Aleetings of Public Companies.

TECOMA SILVER MINING COMPANY.

An extraordinary general meeting of shareholders was yesterday held at the offices, Palmerston Buildings,
Mr. C. C. Adlex in the chair,
For the purpose of considering a proposal received from America for the leasing of the company's property, and for the transaction of such business as the board might deem expedient.
The notice calling the meeting was read by Mr. W. H. HARRISON (secretary)

The notice caring the meeting was read by Mr. W. II. HARRISON (secretary).

In the report which had been sent to the shareholders, it was stated that the offer was for two years, at an annual rental of \$100,000 in gold—20,000/.—from Jan. 1 next, with the option of continuing the lease for a further period of three years, at a rental of \$150,000—50,000/.—per annum, the rental to be paid quarterly, and to give good security for the due and proper working of the mine.

The CHARRMAN said that at last they had a gleam of sunshine through the dark horizon which had clouded their proceedings for some time past. Some of the shareholders met together two or three works. The CHAIRMAN said that at last they had a gleam of sunshine through the dark horizon which had clouded their proceedings for some time past. Some of the shareholders met together two or three weeks ago to endeavour to raise funds to prevent the company going into liquidation. There were two salient points to which the attention of the shareholders would be directed on the present occasion. First, to the offer of leasing the mine; and, secondly, to the issuing of debentures. With respect to the first point, the question was whether they were to refuse the offer or not. The directors had made enquiries concerning the boar fides of Mr. Gordon (the gentleman who had made the offer), and the directors were informed that they were unimpeachable, and that he was a gentleman of known position and influence, and well able to execute what he undertook, and find substantial security for the fulfilment of his contract. Mr. Gordon's offer appeared to have been made with some knowledge of the capabilities of the mine, and indeed, this offer might be taken as an indirect testimony that the value of the mine was very much greater than some gentlemen had recently imagined it to be; therefore, it was not difficult to reconcile this offer with the rumours floating about as to the value of the mine. When he himself was in Paris Mr. Mackenzle had informed him that the mine was a valuable mine, but had been sold at too high a price; but that even on that large price it would give 5 per cent, as it was producing 20 tons of ore daily. Mr. Mackenzle had offered to go to America and work the mine, on the condition that he received no remuneration until 5 per cent. was paid to the shareholders; and Mr. St. Stephen had also offered to go out and work the mine, on the condition that he received no remuneration until 5 per cent, was apaid to the shareholders; and Mr. St. Stephen had also offered to go out and work the mine.

The present offer would give them 6 per cent,, with a prospective increase to 9 per cent. Thus, from four different i

to Bill now filed.

A SHAREHOLDER asked whether Mr. Davis was one of the original directors?

Mr. SNELL said that he was one of the parties to the Bill.

A SHAREHOLDER; Was he a promoter?——Mr. SNELL said that no doubt he was

promoter.
A SHABEHOLDER: What amount will be required if we take the management t the mine upon ourselves, independent of Mr. Davis's claim 7—The CHAHRMAN: Ye should require at least 6000%, or 6000%, additional to go on working the mine. The CHAHRMAN; in answer to a further question, said the directors believed the nine was working at a profit, but as they had not had the accounts they could of tell.

Mr. SCHOEFIELD asked whether Mr. Davis had an extended the control of the control

not tell.

Mr. Schoeffeld asked whether Mr. Davis had any right to keep the mine?—
Mr. Mackenzie said that Mr. Davis stated he had spent \$30,000 upon it, and in
the event of Mr. Davis offering to come to terms the directors must be prepared
with 5000%, and 6 per cent. interest, and take the mine and work it themselves.
There was a stipulation that Mr. Davis should render accounts monthly, but they
had not been as rendered.

with 5000, and 6 per cent. Interest, and take the shareholders must look after There was a stipulation that Mr. Davis should render accounts monthly, but they had not been so rendered.

Mr. H. Whitze said the time was arrived when the shareholders must look after their own property. This was the first time that he had seen a gleam of hope. He had enquired as to the bona fides of the persons who had made the offer, with the view of seeling whether it was to his interest as a shareholder to entertain the offer. Anything connected with the Tecoma Mine was viewed with suspicion. The enquiries which he had made about Mr. Gordon were to his mind satisfactory; but Mr. Gordon made one stipulation, which rather threw a difficulty in the way of the directors. Mr. Gordon stipulated that by the 1st of January the directors must give up the mine to him, clear and free. At present Mr. Davis had the mine in his possessicu, and, fight as the shareholders might, they could not get the mine until they made some terms of settlement with Mr. Davis. The question was what terms of settlement Mr. Davis would accept. When he was in Paris in July last he asked Mr. Davis what he intended to do with the Tecoma Company, and Mr. Davis said that the company had made a claim upon him for some gigunite sum, which he would never entertain in any way: and added, "If spent they will give me a quittance I will give up the mine and all the money I have spen they need not doubt his word for the future.

Mr. Mackenzie: That was coupled with the stipulation that we should raise 60000.

Mr. H. Whitze said that was so, but he would not go into those particulars. The

Mr. MACKEZIE: That was coupled with the supulation that we should raise 6000/.
Mr. H. White said that was so, but he would not go into those particulars. The red question for the shareholders was whether they would accept the offer which had been made by Mr. Gordon, or whether they would refuse it. He hoped the meeting would endorse the Chairman's recommendation, and accept it as a bona

offer. SHARPHOLDER said he believed Mr. Davis had made it a condition of settle t that the directors should withdraw from the claim against him and the ok

ment that the directors should witners when the directors.

Mr. SNELL said the proposal was that the proceedings against Mr. Davis should be withdrawn, but he did not know whether the old directors were included; but, be withdrawn, but he made that all proceedings should be stopped. probably, a stipulation would be made that all proceedings should be stopped against himself and the old directors. As regarded the amount of money required, Mr. Davis had advanced to the amount of 50004, and the claims were 25004, making 75004.; if the shareholders worked the mine themselves they would want another 60004, which would make 13,5004., but if this scheme were adopted they would only require about 70004.

60000., which would make 13,5000., but it this scheme were adopted they would only require about 70000.

A SHAREHOLDER asked whether the directors had yet cabled to Mr. Gordon, accepting his offer?—The CHAIRMAN: Certainly not; they could not telegraph until they had ascertained the opinion of the shareholders.

Mr. GRAY said he should like to know whether this offer from Mr. Gordon had any connection with Mr. Davis, and whether Mr. Gordon and Mr. Davis were in any way mixed up with one another? Were the shareholders to compromise the action against Mr. Davis by accepting this offer? If the shareholders were informed on that point it might influence their decision.

The CHAIRMAN said the directors knew nothing about it: the offer came to them from Mr. Gordon, and they had not the slightest knowledge whether Mr. Gordon was an acquaintance of Mr. Davis or not. Mr. Snell had received a letter from Mr. Gordon on the subject, which, perhaps, the shareholders would like to hear.

Mr. SNEL read the letter. In it Mr. Gordon stated that he was mable to obtain the quantity of ore he required, and, therefore, he thought it would be to his advantage to lease the Tecoma Mine, in order to obtain the amount of ore which he required.

required.

A SHAREHOLDER: Do you know Mr. Gordon,
Mr. SNELL replied that he saw Mr. Gordon at Salt Lake City, and he appeared
to be a man of business habits, and capable of carrying out such a contract. He
believed that Messrs. Wells, Spargo, and Co., the bankers, would give Mr. Gordon
a credit for 100,000. He believed that Mr. Gordon had leased the Utah refining
works, for which he had paid cash down. From what he had seen and heard of
Mr. Gordon he believed he was a man who could carry out the matter.
A SHARHOLDER said that, judging from the tone of Mr. Gordan's letter, there
was no connection between Mr. Gordan and Mr. Davis.

A SHAREHOLDER said he supposed the payments would be made quarterly?
The CHAIRMAN: Certainly.

The SOLICITOR said that if they could tender Mr. Davis 5000% he supposed there would be no difficulty in getting possession of the mine at once, or on giving security for the money, but he did not suppose it would come to that.

Mr. GRAY said the point the shareholders wanted cleared up was with respect to the proceedings against Mr. Davis. Was it or was it not the intention of the board to raise the money to settle amicably with Mr. Davis, or to go on with the proceedings? It would be impossible, with much chance of success, to proceed against the rest of the original directors, after having eliminated from those proceedings? It would be impossible, with much chance of success, to proceed against the vendors of the property. The fact remained that the public had subscribed nearly 300,000%. for this mine, and certainly 29,000%, was but a small return upon the amount. By the Bill in Chancery the company sought to get back some of the purchase-money, and the shareholders must be careful that they did not do anything which would prejudice those proceedings. He thought the recommendation of the directors must recommend itself to business men, and would put the company in a position of independence. He thought it was well worth while to raise 8000% of additional money, but the directors must see that their way was clear before them. As regarded Mr. Davis, all his acts, as far as they had come before the shareholders, went to show that there is no reliance to be placed upon his word. The CHAIRMAN said the directors had told the shareholders everything they knew. As regarded Mr. Davis, the directors would not give up the mine they knew. As regarded Mr. Davis, the directors would not give up the mine throw the same subscribed of the property of the papers of th

Mr. H. WHITE INCOME.

ordon, in its general principles be accepted, and it to be accepted ordon, in its general principles be accepted, and it to be accepted with the second of the resolution.

After a further short discussion, the resolution was put to the meeting and accepted order would assist the directors in sub-

Tried unanimously.

The CHAIRMAN said he hoped the shareholders would assist the directors in sub-cribing for the necessary amount of debentures.

Mr. Fowne said it followed as a matter of course that the shareholders must ubscribe, otherwise the resolution must fall to the ground.

A vote of thanks to the Chairman and directors closed the proceedings.

[For remainder of Meetings see to-day's Supplement.]

Original Correspondence.

MINING IN QUEENSLAND.

SIR,-I have not been able to procure a return of the receipts of tin at the Warwick Railway Terminus for the month of September in time for this mail, but what returns I have been able to procure I give you. The export of tin for the quarter ended September 30, from the port of Brisbane, was as follows:—

Cwts. 7,288 32 Value. Aver. per cwt. 2 31,392 86s. 1d. 45s. To Great Britain Ingots Stream tin ... 27,177 ... £ 81,847

And taking the stream tin to average 68 per cent. of metal it will equal 1041 tons of ingot tin, showing a slightly increased yield when compared with the year 1873—the previous quarter, or previous half-year. The "Brisbane Price Current" for this mail gives the following additional figures, as the export of tin from Brisbane, for the year ended September 30 last:

1874.

1874.

1874.

1	Condo	n.	Bydne	y.	Total.		ear ende Sept 30.
IngotsTons Ore If the ore is estimated at 68 per cent	983		. 3950				
it will average	668		. 2866	*****	3534	*****	2955
Total ingotsTons							

ard of 99.50, the cause of which is that the stream tin goes down to be smelted, our smelting charges being too high, and our freight to London, from Brisbane direct, is also too high (40s. per ton). For wool ships from this port better ballast than ingot tin cannot be procured. Yet our shipping agents prefer ballasting a ship with ballast or loading her light than reducing the freight on this article, the result of which would be securing the whole of it for the direct trade. As I foretold only 12 months ago, only ingot tin is now shipped direct to London. Owing to this grasping policy the English smelters have lost this trade, and with it they have lost the control of the British tin market. It has been my study to give you the most authentic information as to our yield and prospects here. We may expect in the future to see the tin standard steady, falling and rising only from causes that we all can understand, and not flucand rising only from causes that we all can understand, and not fluc tuating, as it has been for the past 18 months, without any ap parent reason.

At Stanthorpe I have to report that about 300 Chinamen have left the field for the Palmer, and I hear the balance, about 300 more, are to at once follow; this, no doubt, will reduce the yield. A few of the gold diggers have returned from the Palmer and settled down on the tin fields for a few months' work, the Palmer being very unhealthy during this wet season, now shortly due, while Stanthorpe is exceptionally healthy during the summer months; but I fully expect to see the bulk of the tin miners start for the Palmer in February next, so soon as the wet season is over, and the country fit to cravel upon. The Palmer has turned out extremely rich, and most travel upon. The Palmer has turned out extremely rich, and most extensive. Many have made handsome fortunes in a few weeks, but the risks and privations they have had to endure, and must yet endure, before the wet season is over is fearful to contemplate. Under these circumstances the supply of tin from here cannot be depended upon. A very rich patch of tin might cause increased activity and the opening up of an extended tin-bearing country, while a good field, although 1500 miles distant, may reduce the present yield very considerably. Again three months of heat times such travel upon. yield very considerably. Again, three months of bad times, such as we had in 1866, would double the yield of tin, as there is room for 50,000 men on Stanthorpe tin field, although 5000 is the very utmost now at work there.

That there are enormous undiscovered patches of tin in Queens-land there is little doubt. Only four weeks ago a rich deposit of tin was found in a gully running into the Palmer river. From other districts just as difficult of access I have from time to time ex-amined specimens of the same metal, but unless convenient to the coast for carriage a mountain of quartz is just as valuable. The

question is often asked how long will the supply of stream tin last? The reply to this question after all can only be an opinion, and mine is that at the rate of working at present at Stanthorpe there will be no perceptible diminution in the extent of stream tin country to be worked during the next ten years, and as machinery and cheap appliances for sluicing and washing are introduced all the ground now worked will be worked over again at a profit. Weighing the pros and cons of the case, it is my conviction that the supply will remains teady for some time at a slight reduction in the present figures. In copper increased activity prevails in most of the districts.

In copper increased activity prevails in most of the districts, Most of the mines have changed hands, a matter on which the colony generally is to be congratulated. The quicksilver mines are being most successfully worked by a few miners, and with the rudest appliances. Rock salt has been discovered in the interior. being most success rudest appliances. Brisbane, Oct. 9.

[For remainder of Original Correspondence see this day's Supplement.]

COAL MINES REGULATION ACT, 1872.

EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY. DISTRICT UNDER THE CHARGE OF THOMAS WYNNE, Esq.,

H.M. INSPECTOR OF MINES. NOTICE IS HEREBY GIVEN, that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 29th day of December, 1874, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must on or before the 20th day of December, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars

By order of the Board,
JOSEPH KNIGHT, Secretary,
Newcastle under Lyne, Staffordshire.

£50,000 PERPETUAL FIVE PER CENT. DEBENTURE STOCK,

BALANCE OF £110,000, SECURED UPON THE EXTENSION TO THE MIDLAND RAILWAY

SOMERSET AND DORSET RAILWAY COMPANY.

TOTICE IS HEREBY GIVEN, that the SUBSCRIPTION LIST for the above will be CLOSED on TUESDAY next, the 15th instant, for COUNTRY APPLICATIONS.

By Order,

A. DIFFORD, Secretary.

General Offices, Glastonbury, Somerset, Dec. 10, 1874.

SAVING LIFE AT SEA.

THE SUBSCRIPTION LIST will CLOSE on SATURDAY, the 19th December, for LONDON, and on MONDAY, the 21st December, for COUNTRY APPLICATIONS.

Issue of 4000 Shares of £5 each-£20,000-

PATENT SELF-LAUCHING LIFE RAFT COMPANY

(LIMITED). (ROPER'S PATENT.)

Incorporated under the Companies Acts, 1862 and 1867, by which the Liability of the shareholders is limited to the amount of their shares. Capital £30,000, in 6000 Shares of £5 each.

The proceeds of 3000 shares will be applied as Working Capital. ment on application £1, on allotment £2, on 1st February, 1875, £2.—

Total, £5.

The Patentee has agreed to accept two-thirds of the purchase-money in fully paid-up shares, and to pay all expenses incidental to the founding of the company up to and excepting its registration.

In the event of no allotment being made, the deposit will be returned without any deduction; but should a smaller number of shares be allotted, the balance paid on application will be applied towards payment of the amount due upon allotment.

Admiral F. A. B. CRAUFURD, United Service Club, Pall Mall. Admiral R. A. POWELL, C.B., Blackheath, Kent. Lord RONALD GOWER, Stafford House, St. James's, S.W.

Lord RONALD GOWER, Stational House, St. James's, S.W.

DIRECTORS.

THOMAS P. BAKER, Esq., R.N., C.B., Late Chief Engineer, Her
Majesty's Dockyard. Chatham.

Commander FELLOWES, R.N.

Captain GEORGE MACDONALD, R.N., Marine Superintendent,
Australia Direct Steam Navigation Company.

Captain JAMES RENNIE, C.B., Late Marine Secretary to the
Government of India, Director of the London and Glasgow
Engineering and Iron Shipbuilding Company.

GENERAL SUPERINTENDENT.—RICHARD ROPER. Eso. GENERAL SUPERINTENDENT .- RICHARD ROPER, Esq.

CONSULTING NAVAL ARCHITECT.
PHILIP THORNTON, Esq., M.L.N.A., Late Muster Shipwright, &c., Her
Majesty's Dockyard, Chatham,

MARINE DRAUGHTSMAN.

THOMAS HENRY CULLIS, Esq., late Chief Marine Draughtsman at Messrs.

Maudslay, Sons, and Field, Shipbuliders, Lambeth and Greenwich.

BANKERS.

Messrs, ROBARTS, LUBBOCK, and CO., Lombard-street.

THE LONDON AND YORKSHIRE BANK, and its Branches,
57, Old Broad-street, E.C.

Messrs, HALLETT AND CO., 7, 8t. Martin's Place, Trafalgar Square,
SOLICITORS.

Messrs. SHARP AND TURNER, 31, Lombard-street, E.C.

Messrs. KNIGHT AND MILLER, 1, Royal Exchange Buildings.

AUDITORS.
Messrs. C. F. KEMP, FORD, AND CO., 8, Walbrook, E.C.
SECRETARY (pro tem.)
MURRAY HOWELL-MURRAY, Esq. TEMPORARY OFFICES.

14 AND 15, ST. SWITHIN'S LANE, CANNON-STREET, E.C.

Where a model of the Patent Shaft may be inspected.

PROSPECTUS.

PROSPECTUS.

The immense loss of life at sea by shipwreck, fire, foundering, or collision, is a question which has formed the subject of painful consideration for years. Scarcely a month passes without some serious disaster, and a large proportion of the life-loss can be traced to the use of inefficient life and other boats, and the many difficulties and dangers which attend their lowering and overcrowding.

The Times of the 30th October, 1874, in wishing success to this invention (see Press reports), worde—"This chief lesson to be drawn from nearly every week of a large passenger steamer is the utter break down of the boat system."

This company is formed for the purpose of purchasing and working an invention, patented in England 30th April, 1873, which adapts the present "Captain's Bridge" as a self-launching raft, fitted with water-tight seats, containing salis, masts, and oars, provisions, fresh water, stores, rockets, and is capable of saving malis and specie. The raft is furnished with compasses and rudder, and every requisite for sustaining life.

The raft can be launched from either side of a ship. The ends of the launching

sustaining life.

The raft can be launched from either side of a ship. The ends of the launching ways (which are fitted with friction rollers) are lowered level with the deck, and the raft is carried clear of the ship by the impetus of its weight. In the event of the vessel foundering the raft disengages itself and floats in safety.

The advantages which this raft possesses over every other means of saving life are apparent, and in addition have been verified by the opinions of naval authorities engineers, and shipwarer.

The advantages which this raft possesses over every other means of saving life are apparent, and in addition have been verified by the opinions of naval authorities, engineers, and shipowners:—

1. It is always ready, and does not need any covering such as protects boats.—

2. It is self-launching, as no ropes or lashings have to be cut away.—3. The launching cannot be affected by the freezing of the ropes used by boats.—4. It cannot be swamped.—5. It will live in any sea.—6. It cannot be sunk, being built upon the cellular principle, and even should one or more of the cells be damaged, the safety of the raft would not be impaired.—7. One or more of these rafts can be fitted, which would save the lives of the crew and passengers of a vessel of the larged class, its containing powers being only limited by size.—8. It can be constructed at less cost, and is of less weight than a life-boat, size for size.—9. It utilises a necessary part of a ship, and can be fitted in front of poop or forecastle cabins, thus forming an extension of the decks of the cabins.

It is well known that the difficulties attending the launch of ordinary life or other boats render the act one requiring the greatest care; frequently the ropes freeze and the boats cannot be lowered, neither can they be successfully lowered when the vessel rolls much. In the case of the wreck of the Atlantic, one of the White Star line, over 700 lives were lost, although the ship carried ten boats. Many other instances might be cited, but they are of too common occurrence. The eas and certainty with which the patent raft is released from the vessel, its buoyancy, carrying capacity, and cheapness must ensure its general adoption in the ships of all countries.

This raft will not only be available for saving life, but also for landing treops,

carrying capacity, and cheapness must ensure its general adoption in the single of all countries.

This raft will not only be available for saving life, but also for landing treeps, passengers, and cargo.

The only contract affecting the company is one dated the 30th day of November, 1874, between Richard Roper and Murray Howell Murray, on behalf of the company, by which the English patent and the right to patent the invention in all countries and colonies is purchased by the company for £15,000, payable £5000 in cash, and £10,000 in fully pald-up shares of the company.

The working capital of the company will thus be £15,000. The directors take nowers under the Articles of Association to erect suitable works for the manufacture of the Patent Life Rafts in the event of their not being able to effect satisfactory arrangements with firms for their manufacture.

The dividend payable on the capital will necessarily be large; for beyond the profit derivable from the sale of the Patent Life Rafts, the directors propose to

grant licenses to shipowners and builders to manufacture upon payment of a royally to the company.

The directors feel that, in introducing this raft to general use, they will be doing such work as has hitherto fallen to the lot of the Royal Rumane Society.

The Memorandum and Articles of Association, and the contract may be seen at the offices of the solicitors to the company, where, and at the offices of the brokers, and torms, and company, prospectuses and forms of application may be obtained.

auditors, and company, prospectuses and forms of application may be obtained,

THE PATENT SELF-LAUNCHING LIFE-RAFT COMPANY
(LIMITED).

Extracts from the Opinions of the Press and Certificates upon
ROPER'S LIFE-RAFT.

"LIFE-RAFTS.—Roper's Self-Launching Life-Raft appears, on the face of it, so
simple and effective, that it is hard to see how it can fail. This invention merits
the attention of shipowners from an economic point of view. The chief point to
be considered is whether the raft may not be a means of saving life at sea more
efficacious than those we now possess. The chief lesson is to be drawn from nearly
every wreck of a large passenger steamer is the utter breakdown of the boat system.
As regards the mercantile marine, the boat system of saving life has proved itself
as nearly utterly worthless as a system can be. We wish success to Roper's
Life RAFT."

ECHOES FROM THE MINING MARKET.

Owing to the rapid approach of the Christmas holidays we have had an inactive market for the past week. Metals, however, remain in statu quo, prices being generally pretty steady. From Cornwall we learn that the markets there are in a very stagnant condition, but we cannot look for a much better state of affairs until after the close of the year, when we may with some reason expect a revival of trade. The late check in the upward tendency of copper has produced so far no untoward effects, and the statistical accounts of the trade show that the demand still continues. The rise in the money market alone seems to prevent further advances in this metal, for the diminution in stocks has been no less than 7000 tons during the past four months. Speculation in tin appears for the moment to be at a stand-still; and as prices are thus depended upon demand for consumption alone, and that has been good, the market has been supported. The dearness of money seems to have had a good effect in this metal, for speculators do not like to operate under such conditions. Colliery shares are, on the whole, good. Iron stocks, on the other hand, show depression.

We hear that the stone-breaker lately introduced at Tincroft has (as it could not have failed to do by-the-bye) given complete satisfaction. The merits of the invention are recognised now throughout the entire kingdom. The work to be done is performed in a thoroughly economical manner—time and labour are saved—and yet the machine is only met with in the county in question in one or two enterprising mines. At the others the old-fashioned and expensive method of spalling the ores by hand is still resorted to. At Tincroft it is stated that they are able to stanp one-third more than they could do if the stuff were broken the old way. What then can prevent a general recognition of the merits of the breaker? Prejudice we suppose, the same that objected to a railway engine, and would object to anything that happened to be out of the beater track.

Wheal Peever has surmounted its dif Owing to the rapid approach of the Christmas holidays we have

PROGRESS OF THE SUTRO TUNNEL .- During October the work men in the Sutro Tunnel have been very successful in pushing it forward. During the week ending Oct. 8, 83 ft. of 10 × 14 tunnel were made: Oct. 15, 80 ft.; Oct. 22, 81 ft. From Oct. 22 to Nov. 1, 116 feet, making a total of 360 ft. in a single month. This is not only the largest result yet accomplished, but the greatest month's work or record in the history of tunnel making. The whole length of the tunnel now completed is 7790 feet. This work speaks well for the Burleigh drill, which is used in the Sutro Tunnel.—Virginia Independent.

the Sutro Tunnel.—Virginia Independent.

Owing to a clash between the San Francisco and London stockrokers, operations at the St. Lawrence Mine have ceased, both at the mill and
inderground. At the time of quitting work the north drift was in the finest or
ever seen in the mine. The suspension will result in the filling up of the mine
ith water, and this will lead to a general caving in, which will be the utter ruif
a valuable and finely-opened mine, the deepest in this county.—Placerville

PURIFYING COKE.-Mr. S. DE NOMAISON, of Perigueux, has pa PURIFYING COKE.—Mr. S. DE NOMAISON, of Perigueux, has patented a process for purifying coke from sulphurous and other detrimental compounds. The combustible is heated to redness with exclusion of air, whereby the pyrites or bi sulphides of iron which it contains is converted into protosulphide. It is then received in tanks containing water, to which is added hydrochloric acid, which dissolves the protosulphide of iron, disengaging sulphretted hydrogen, and also dissolves others of the earthy matters present. The coke is then washed with water and dried. The process is most readily effected upon small coke or dust, and it is, therefore, in some cases preferable to pulverise the material in the first place, and to agglomerate it into blocks after purification. The process is applicable to peat and anthracite, and lignite treated in this manner gives a product which has the qualities of wood charcoal.

	LEA	AD (OR	E	8.	
Date. Mines.	Tons.	P	rice r	pert	on.	Purchasers.
Dec. 7-Esgair-Hir	11 .		£15	16	0	Sheldon, Bush, and Co.
- ditto	14		6 1	19	8	Glover and Robinson.
-Lisburne-Glogfac	ch 15					Panther Lead Company.
-East Darren	50			1	6	ditto
-Cwmystwith			15		0	
8-South Darren			21			Nevill, Druce, and Co.
9-De Broke	12	*******	14			Walker, Parker, and Co.
10-Talargoch					0	
- ditto	70 .	*******			0	
-North Hendre	30	******	15			Adam Eyton.
-Prince Patrick	59 .	******		1	6	
-South Prince Pati			16	1	6	ditto
-Rhosesmor			13			Walker, Parker, and Co.
-Wagstaff	9 .	******				Adam Eyton.
-St. David's	b .	******	14		0	ditto
-Roman Grarels			15			Walker, Parker, and Co.
- ditto	50	******	15			Glover and Robinson.
	50		15 1 15 1			ditto Burry Port Company.
- ditto	50		10	10	0	Burry Port Company.
	В	LEN	DI	E.		
Date. Mines.		P	rice r	per t	ton.	Purchasers.
Dec. 9-Willoughby	30		€ 2	2	6	Ripley Spelter Co.
10-Roman Gravels	50		3	1	6	Villiers Spelter Co.
	DT.	ACK	m	TN	-	
Date. Mines. To			_			Amount. Purchasers.
Nov. 27-Polrose	5 4 0	20.	255 1	5 per	0 6	290 7 11—
Dec. 4-N. St. Blazey	1 8 3	23	53	5 (0	77 1 10-Daubuz.
- ditto	0 12 1	26				24 19 3— ditto
5-Pedn-an drea		12	58		6	899 15 11-Carvedras.
-Wheal Uny	14 2 3	6	-	-		obb to 11—Carvedius.
7-So. Condurrow.	12 7 2	2	57	0	0	705 18 2
-	CODI	077	-	n.	20	
Date. Mine.	COP1		rice T			Purchaser.
Dec. 8-South Darren	7008	Pi	o k	p. to	0	Vivian and Sons
Darren	20	********	. 0	0	0	vivian and Sons.
	COPI	PER	0	RI	28.	
Sampled Nove						December 8

		_			
			R ORES.		
261			old at Swansea, December 8.		_
Mines. Tons. Produce.	Price			rice.	,
Cape Ore 74 297/8 £	25 6	0	Knockmahon 126 83/8 £7		6
ditto 74 29 %	25 17	0	ditto 89 814 1	0	6
uitto 77 28	24 2	0	Berehaven 92 874 7	11	6
UHITO 54 361/	81 7	0	ditto 81 9 7	13	6
ditto 16 4834	42 2	0	Var Ore 105 17 14	6	0
0100	24 1	0	Bampfylde 37 61/8 6	17	0
ditto 52 2776	24 0	0	ditto 31 536	0	0
unito	94 18	0	Burrawing 29 8 (5	0
UIU10	21 7	0	Telhadella 6 2974 24	17	0
61 25	21 7	0	ditto 17 15 1:		6
01110	21 10	6			0
UIII0 58 941/	21 4	6	Copper Ore 5 2554 2		0
Knockmahon 141 85%	7 6	6			
To		P	RODUCE.		
Cape Ore 662 £16,2	08 7	6	Burrawang Ore 29 £18:		0
Allock mahon 256 9 g	49 10	0	Telhadella Ore 23 350		6
	18 11	6	Copper Regulus 11 400		0
		0			0
Bampfylde 68 3	03 9		Copper Ore 5 100	3 10	U

COMPANIES BY WHOM THE	Tone	Am	annum4	
Copper Miners' Company	Tone.	0 1 01	Tount	
P. Grenfell and Sons		& 1,91	3 18	0
P. Grenfell and Sons	1045	4,20	28	6
			1 8	6
			2 1	6
			9	6 6
				0
Capper Pass and Son	5	10	6 10	0
Total			2 9	6
Copper Ores for sale on Dec. 22.—Cape O —Berchaven 142—Union Ore 76, 34—Bi sbon Ore 10, 5.—Total, 1096 tons. —TOTALS AND	impryide 40	, 10, 5—Conco	62, 42 rdia (2, 70, 70 Ore 11—
	A VERAGES			
Whole sale 142218 11-16 £16		Per nnit. F	tand	

FOREIGN MINES.

St. John Del Rey.—Telegram, Dec. 7: Produce, 13 days of Nov. econd division), 15,145 oits.: yield, 94 oits. per ton; produce per diem, 1165 oits. eneral work on mine and surface going on well, and satisfactory duty being per-

reneral work on mine and surface going on wen, and satisfactor, daily being performed.

DON PEDRO.—Telegram from Rio, Dec. 7: Produce cleaned up, 000 oits.; estimated produce for the month (Nov.), 4500 oits.

MINERAL HILL.—Mr. Oakes (superintendent at the mine) writes fov. 16—The ore raised this week is 40 tons, of an average grade of \$30 per ton. RICHMOND CONSOLIDATED.—Cablegram from the mine at Eureka, fevada: Hall, London: Week's run, \$51,000; Richmond ore only.

EBERHARDT AND AURORA.—Telegram from Capt. Drake: Number of tons cushed in Nov., 1012; average assay, \$55: produced \$38,552. Mine ooking well.

oking well.

COLORADO TERRIBLE LODE.—Account sales of Nos. 45, 46, 47, 48, 44, 49, rive net proceeds 3099L. due Jan. 21. The next sale is on the 14th inst. COLORADO TERRIBLE LODR.—Account sales of Nos, 45, 46, 47, 48, and 49, give net proceeds 30991, due Jan. 21. The next sale is on the 14th inst. Nov. 18.—The agent sends railway freight note for 64th and 65th shipments; the latter consists of 71 sacks of first-class ore, 8558 lbs.; 145 sacks second-class ore, 12,008 lbs.; total, 21.416 lbs. The 65th shipment will leave on Nov. 21. Weather fine, but cold; building progressing steadily. The mine producing some very good ore from the 5th and 6th levels. The men at the shaft will complete the trip-plat and timbering this month. The 7th level, east and west, will then be pushed on with all the speed possible. The weekly report of the underground captain (H. Lumpshire) states that there are good veins of ore in the 5th level stopes, Nos. 8, 4a, and 5: in the latter the vein at one point is from 10 to 12 in, wide. Shipments 67, 58, 59, and 60 have arrived in Liverpool. Account sales of 45th, 45th, 47th, 48th, and 49th give net 3096/. 18s. 6d., due on Jan. 21, 1875. Shipments Nos. 50 and 56 are sampled for sale.

CEDAR CREEK GOLD MINES AND WATER.—Telegram from the Superintendent, Col. T. B. Ludlum, dated Dec. 7: Ditches full; washing season commences favourably.

BRIDSEYE CREEK (Gold),—G. S. Powers. Nov. 15: We still have

superintendent, Col. T. B. Ludium, dated Dec. 7: Ditches full; washing season commences favourably.

BIRDSEYE CREEK (Gold),.—G. S. Powers, Nov. 15: We still have about 400 inches of water in Birdseye ditch, which we are utilising to the best advantage possible on Neece and West claims. Should we have following rains the water will most likely increase, otherwise it will fall back to its usual head of about 100 inches in a very short time. In the future I shall endeavour to make longer runs in Neece claim; except it becomes necessary to re-adjust the sluice rifles I shall make the runs 60 days in the place of 30, as heretofore cabled. The drifted ground is narrowing down rapidly, and I shall hope to get fast all former workings by the time the present run is in. I shall keep you advised of any changes in regard to the water supply, as well as all others.

SWEETLAND CREEK.—G. D. McLean, Nov. 7: Raining hard, but do not know yet whether it be continuous or not. We have commenced washing.

some measures are considerable. The related so that the contract of the contra

and schist. The lode in the 110, east of the same, is 1 ft. wide, also of schist and flookan. In the 30 east the lode is 1½ ft. wide, worth ½ ton of cobait and copper ores per fathom. In the 20 east the lode is 7 ft. wide, worth ½ ton of cobait and copper ores per fathom. In the 20 east the lode is 7 ft. wide, corth ½ ton of cobait and copper ores per fathom. In the 20 east the lode is from 4 to 5 ft. wide, of white quartz. The slide lode in the 50 is 2 ft. wide, composed of flookan.—Carvalhal: In the 60 eross cut, south of incline-shaft, the ground is of the srme quality as for some time past. At present there is no branch in this end.

ALAMILLOS.—Dec. 2: The 30, west of San Francisco shaft, is in a large lode, containing good stones of ore, value ½ ton per fathom. In the 50, west of this shaft, the lode is very wide, but yields no ore of value. Good progress is being made in the 50 cross-cut north. The 55 end, east of Taylor's engine-shaft, has much improved, now yielding 2 tons per fathom. The same level, west of Julian's winze, is in a very fine lode, and moderately easy for driving, and producing 2 tons of lead ore per fathom. The 85, west of Taylor's, contains good stones of ore. The 40, west of Joaquim's winze, is in a very ompact and regular lode, yielding 1 ton per fathom. The 40, east of 8an Carlos shaft, is being driven to meet the last-named end, and is worth 1 ton per fathom. In the 50, east of 8an Victor shaft, the men are cross-cutting north to prove a part of the lode standing there. In the same level, east of San Carlos shaft, the ground is hard, and the lode small. The 50, east of Judd's engine-shaft' is in a lode of promising appearance, and yielding good stones of ore. There is no improvement in the 60, east of this shaft. In the 40, east of air shaft, the men are now driving west to get under Blas winze, which we expect to hole in a few days. The lode in the 50, ewest of of Swaffield's, is disarranged and unproductive at present. San Adriano shaft, below the 60, owe have a very good party o

fathom. In Daniel's winze, below the 50, the lede is small and disarranged at ent. The lode in Jorge's winze, below the 40, yields 2 tons per fathom; and, ough smaller than it was is still of great promise. The usual quantity of ore raised in the past month, without causing any change of importance in the es. The machinery in the different sections of the mine is working very well, the surface works are going on regularly. We estimate the raisings for Decemat 225 tons.

stopes. The machinery in the different sections of the mine is working very well, and the surface works are going on regularly. We estimate the raisings for December at 225 tons.

LINARES.—Dec. 2: Pozo Ancho Mine: The 100, west of Warne's engine-shaft, is passing through a very good shoot of ore, worth 3 tons per fathom. The same level east is temporarily suspended; the lode is worth 1½ ton per fathom. In the 55, west of Crosby's shaft, the lod is diminishing in value, now worth ½ ton per fathom. In the same level, on south lode, there is no improvement. The lode in the 75, west of Crosby's, is small and unproductive. The ground in the 75, east of San Francisco shaft, is hard for driving, and the lode small and poor. The lode in the 75, east of Sanse shaft, also continues small, and of no value. The 65, west of San Francisco, is opening moderately productive ground, worth 1 ton per fathom. There is no change in the same level east. No. 134 winze, below the 35, is going down in a fine shoot of ore, yielding 2 tons of ore per fathom; this is west of Warne's, and over the 100. No. 156 winze, below the 65, west of San Francisco shaft, is on a small and regular lode, yielding 1 ton per fathom. The weekly weighings of ore were well maintained during the past month, and the stopes are looking moderately well at present. The ordinary surface works are going on very regularly, and the machinery is in a satisfactory condition. We estimate the raisings for December at 150 tons.—Quinientos Mine: In the 80, west of Taylor's engine-shaft, the lode has become small and poor. In the 65, west of Taylor's engine-shaft, the lode has become small and poor. In the 65, east of Taylor's engine-shaft, the lode has become small and poor. In the 65, east of Interessed in size, and contains decomposed granite, carbonate of lime, and good stones of ore. The lode in the 85, east of Malicis shaft, is large and strong, but does not contain ore enough to value. The 55, west of San Carlos shaft, is in a well-defined lode, with occasional stone

and yields 3 tons per tathom, and is compact and strong. Cheea's winze, below the 65, has also improved, and is worth 1½ ton per fathom, and is open and easy for sinking. We estimate the raisings for December at 160 tons.

FORTUNA.—Dec. 2: Canada Incosa: The lode in the 110 fm. level, west of Henty's shaft, is large and strong, containing two or three branches of lead, worth 1 ton per fathom. Nothing new has been met with in the 80 cross cut, south of the same shaft. The lode in the 60, west of San Pedro's, is discordered, and of no value. In the 60, west of this shaft, in outling in the south side, a small branch of spar has been met with, on which the end is being driven. In the same level east a cross-cut is being driven from this end to hole to San Federico's shaft. The 50, east of San Federico's shaft, yields ½ ton per fathom. In the 40, east of this shaft, the lode is divided into two branches of lead, yielding ½ ton per fathom. The lode in the 80, west of Kennedy's shaft, is becoming larger, and contains a little lead. The 90, west of Lownde's shaft, is becoming larger, and contains a little lead. The 90, west of Lownde's shaft, has opened a good length of rich ore ground, worth now 1½ ton per fathom. The same level east also produces 1½ for per fathom. The lode in the 80 fathom level, east of Caro's shaft, is small, yielding ½ ton per fathom, and the ground hard. In Judd's shaft, sinking below the 100 fathom level, the men are doing tolerably good work. Fair progress is being made in San Federico's shaft, below the 50, considering the large quantity of water the men have to contend with.—Los Salilos: In the 110, west of San Carlos shaft, a slight improvement has taken place; present yield ½ ton per fathom. The lode in the 90, west of this shaft, is regular, but unproductive. In the 120, east of Morris's engine-shaft, the lode is large and vughy, yielding ½ ton per fathom. The lode in the 45, west of Palgrave's engine-shaft, the lode is large and vughy, yielding ½ ton per fathom. In Londre's shaft, and n

per fathom. Merino's winze, below the 100, is in a small compact lode, yielding ½ ton per fathom. There is no improvement in Ricardo's winze, below the 35.

LANESTOSA.—Dec. 2: Asuncion: The lode in Judd's shaft, sinking below the 80 metre level, yields ½ ton of lead and ¾ ton calamine per fathom; the surface water from the heavy rains has prevented the completion of fork, and it is likely we shall have to manage with the sink made. The 80 metre level, north of Judd's, has just struck the lode on the west side, and shows spots of lead. The same level south is being driven in the country rock a short distance to avoid weakening the shaft. In the 60 south the lode yields ½ ton lead and ½ ton calamine per fathom, and is increasing in size, but is barder, and contains less ore in the ventilating winze below the 60 south the lode has narrowed to 1½ ft. and all traces of ore are lost for the present. No. 1 winze from the north adit is holed to the 60, establishing ventilation in the north ground; the calamine gone through there may now be worked, as the stuff can be got through at surface. The intermediate level north from No. 2 winze in adit south shows a good lode 3 feet wide, yielding 2 tons lead and 2 tons calamine per fathom. The same level south being poor, is suspended, and the men set to stoping the back, where the lode produces ¼ ton lead and 3½ ton calamine per fathom. No. 1 stope in back of the 60 south is a new point just opened, while) shows a favourable lode for a considerable length. No. 2 stope in back of Cave level has been resumed, and the lode yields ½ ton lead and ½ ton calamine per fathom : the branch of ore being small and expensive to work, stoping has been discontinued. The trial level from the stope in the 20 having ventilated that level, and the fmain lode presenting morthing worthy of further trial, the driving has been suspended. The samplings for November are—31 tons lead, 19 tons calamine, and 10 tons mixed ore, and it is estimated that about 35 tons lead and 25 tons calamine, &c., will b

PONTGIBAUD,—W. H. Rickard, Dec. 2: Roure Mine: We have finished the cutting of the 100 plat at the new shaft, and commenced sinking below that level for bearers and cistern; the rock is hard and sparey. The 80 metre level north, on Vitginie's lode, has entered more favourable ground for progress; the lode is unproductive. The rise in the back of this level, near the end, is in a hard quartz lode, spotted with ore. The 80, south of junction, is suspended, the lode continuing to look unkindly. The 60 metre level north continues in hard ground, the lode is regular, composed of quartz, spotted with ore. The 80, south of junction, is suspended, the lode continuing to look unkindly. The 60 metre level north continues in hard ground, the lode is regular, composed of quartz, spotted with ore. The 80n elvel south is poor. The 40 south is opening tribute ground, worth ½ ton of ore per current metre, but the same level north is unproductive. The 20 metre level, north of Nosky's shaft, continues poor. The lode is large, composed of jointy quartz, spotted with mundic, and occasionally with lead ore. The winze below the 100, in advance of this end, yields ½ ton of ore per current metre.—La Brousse: The 140, south of Bassets shaft, has assumed a kindlier appearance, and we hope we shall soon enter orey ground. The 120 end south is still suspended, in order to hole the rise behind it for ventilation, which we hope to do in abont a week from this date. The 100 metre level south has opened ground worth ½ ton of ore per current metre during the past month, but is now unproductive. The 80 south is poor. The 60 cross-cut, towards the new shaft, advances favourably. The sinking of the new shaft has been hindered by water which comes from surface, and we are now making the necessary arrangements to drain the collar of the snaft.—Pranal: The 90 cross-cut, to the east of 8t. George's shaft, has entered the main part of the lode, which is strong and kindly, and yields ½ ton of ore per current metre. The same level south is poor. The 60 PONTGIBAUD,-W. H. Rickard, Dec. 2: Roure Mine: We have

MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

WEST ESGAR LLE.—There is nothing of importance to report this week. All the machinery at both mines is in good order, and dressing ore has been carried on with the usual regularity, but with a slight increase in the percentage of returns, in consequence of the more solid character of the orenow coming from underground. The stopes at western mine are without the slightest change, and are producing from 2 tons to 3½ tons of ore per fathom. At the eastern mine has 4 end east is being pushed on with all vigour in a lode of such promising character, as to induce a strong expectation of meeting with the run of ore gone over in the level above much earlier than was previously auticipated. The 24 end east is without change from last week, and valued at 30, per fathom. The same level west is worth 1 ton of lead ore—say, 13, per fathom. Both of these levels are being extended with all speed to communicate with winzes sinking from the 10, and so open up a large piece of rich stoping ground. The 10 end remains the same as for some months past, worth 20% per fathom: the stopes in this back of this level look well, and are valued at 25%, per fathom. Great Rake Lead Minne (Brassington).—The directors, on visit-

GREAT RAKE LEAD MINE (Brassington).—The directors, on visit-GREAT RAKE LEAD MINE (Brassington).—The directors, on visiting the mine on Dec. 1, say:—"We found the works going on satisfactorily. The adit towards the Great Rake was driven 110 ft. Bonny Lad adit 77 ft.; this adit has crossed the lane, and was about 14 ft. in the opposite field. The captain says he ealculates meeting with a large quantity of caulk after about 20 yards further drivage, which we believe will nearly pay working expenses. This drive continues very kind, and the 20 yards will soon be completed. The drive towards the Great Rake is hard, and requires blasting, and taking into account the nature of this drive the present hard pannel will soon be got through. The directors have every confidence in the success of these mines."

The following report was received too late for insertion in its proper place:-The following report was received too late for insertion in its proper place:— FRON VELLAN.—Captain Harper, Dec. 9: The stope in the root of the level, west of deep adit, is looking a little better than it has been, and judging from the ground and lode this run will go through to the intermediate level, which is about 9 fms. between; the lode is 2 ft. wile, worth for lead ore about 12 cwts. per fathom, and is set to six men, at 55s, per fathom, the men to bring all their stuff to surface for the same. In repairing No. 1 level last week we found that the run of ore seen the lode is dipping west, and by driving No. 2 level a few fathoms further we shall get into it. I have sent off samples for the 6 tons of lead ore that we have ready. We are getting on as fast as possible with the dressing.

Registration of New Companies.

The following joint-stock companies have been duly registered:-

ANGLO-FOREIGN TRADING, WHARFING, AND WAREHOUSING COMPANY (Limited).—Capital 100,0004., in 54 shares. To acquire whatves and establish agencies for the receiving and shipping of goods. The sub-cribers are. R. F. R. Betty, North Shields, 20; F. C. Perkis, 2, Park Villas, East Queen's road, Richmond, 1; J. Colborne, Park place, St. James's street, 1: Prince de Vismas et de Panthien, 24, Ryder street, St. James's, 20; W. de la F. Wright, 16, Hyde Gardens, 5; P. R. Klein, 14, Rutland-road, East, 20; and H. W. H. Rance, Cambridge, I share.

ALLIED SERVICES CO-OPFRATIVE BREAD COMPANY (Limited). ALLIED SERVICES CO-OPFRATIVE DIREAD COMPANY (LIMITED).

Applied 20,00%, in It. shares. To carry on business as bakers and dealers in flour,

Ac. The subscribers (who take one share each) are—G. C. Talbot, 31, Ladbroke
Gardens; J. C. A. Lewis, Governor of Pentonville Prison; J. H. Reilly, the Grove,
Hammersmith; J. Bell, Uxbridge-road, Surbiton; J. Greenfields, Elmore-street,
Lalington; F. A. Hooker, 52, Leinster-square, W.; and G. B. Haly, St. Paul'screscent, Camden Town.

Crescent, Camden Town.

CRANSLEY IRON COMPANY (Limited).— Capital 50,000l., in 5l.

CRANSLEY IRON COMPANY (Limited).— Capital 50,000l., in 5l.

Wallis, Kettering; T. Wallis, Rouell Lodge, Rouell; G. W. Lamb, Kettering; F. D. Sharp, Finedon; J. A. Wallis, Burton Latimer; and F. R. Pashley, Woodford, Northampton.

New Castle Grain and General Warehousing Company

Climited, Capital 109,000l., in 10l., shares. This company's object is explained.

All W. Castler (1994). This company's object is explained by its title. The subscribers are -G. A. Fenwick, Newcastle-on-Tyne, 500; Ralph Brown, Newcastle, 50; J. Thompson, Newcastle, 100; B. F. Proter, Newcastle, 20; J. Thompson, Newcastle, 10; B. F. Proter, Newcastle, 20; J. Watson, Gateshead, 5; R. S. Watson, New-

RUSSIA SLATE COMPANY (Limited).—Capital 100,000l., in 50l. shares. To acquire slate quarries in Russia. The subscribers are—Prince S. Rolschowbey, Paris, 500; Prince Pierre Trouletg Rol, Paris, 20; B. Ostrogradsky, Paris, 2; T. H. Linklater, Gresham House, 20; E. T. Deprez, Landowne-road, Notting Hill, 20; M. N. Girdlestone, Gresham House, 20; A. H. Maturin, Phenixplace, Blackheath, I.

place, Blackheath, I.

GAMP FLOYD MILLING AND MINING COMPANY (Limited).—Capital 12,00%, in 11. shares. To acquire from the official liquidators or otherwise some of the property of the Camp Floyd Silver Mining Company (Limited). The subscribers (who take one share each), are —J. Bonella, 25, Old Broad street, C.E.;

— Webb, 23, Old Broad-street; J. C. Watson, Buntingford; A. Good, 7, Poultry;

M. E. Wilkins, King-street, Chelses; B. P. Daniel, 7, Poultry; H. Holland, Acton.

LICENSED VICTUALLERS COAL COMPANY (Limited). — Capital 10,000%, in It. shares. To carry on business as ecal merchants.

LICENSED VICTUALLERS COAL COMPANY (Limited).—Capital 10,000/., in Il. shares. To carry on business as coal merchants. CROWLE CHARRING AND CONDENSING COMPANY (Limited).—Capital 10,000/., in Il. shares. To acquire a patent known as "Kidd's Patent" for charring peat, &c. The subscribers are—A. Barff, Merton Cottage, Merton, 200; J. Drysdale, i, Regent street, 150; J. Kidd, Auckland-road. Batter-sea Rise, 5; D. Livingstone, Upper Norwood, 5; H. Power, Elder-road, Kennington, 5; M. S. Hopkins, Bishopgate street Within, 1.

VRON LEAD MINING COMPANY (Limited).—Capital 6000/L, in 10/Lshares. For mining in the parish of Halkin, Flint. The subscribers (who take one share each) are—S. J. Southey, Wexham, Bucks; Trew Jegon, Slough; J. Brown, jun, Croydon; C. Eley, 22, Guilford-road, South Lambeth; A. B. Brown, George-street, Hanover-square; J. Carter, Denbyer road, Bayswater; and H. Humphreys, Hendregaeros, North Wales.

SANITARY WORKS ASSOCIATION (Limited).—Capital 150,000/L, in 10/Lshares. To carry out various sanitary improvements, &c. The subscribers (who take one share each) are—H. Wright, East Dulwich; J. S. Chadd, Bryant-wool-road, Highbury; C. F. Swann, 57, De Beauvoir-terrace.

BIRMINGHAM AND MIDLAND BOATBULLDING COMPANY (Limited).—Capital 50,000/L, in 10/L shares. To carry on business as boatbuillers, &c. The

BIRMINGHAM AND MIDLAND BOATBUILDING COMPANY (Limited)—Capital 50,000., in 10% shares. To carry on business as boatbuilders, &c. The subscribers are—G. Baker, Birmingham, 50; J. Carter, Edgbaston, 30; J. Carter, ind., Aston, 40; Arthur Wade, Edgbaston, 20; W. Edwards, Aston, 10; S. A. Letts, Stechford, Yardley, 20; and S. Amphiett, Edgbaston, 20.

HIGH CARR COAL AND IRONSTONE COMPANY (Limited).—Capital 25,0002, in 500, shares. To acquire a mining property at Wolstanton. The subscribers (who take one share cach) are—T. Ford, Broughton Hall, Staffordshire; B. Ince, 22, Great Winchester street; F. S. Isaao, 22, Great Winchester street; L. Isaac, 63, Bistopsyate street: F. J. Ford, Hanley, A. G. Renshaw, Doctors Commons; J. Blake, 22, Great Winchester street.

MIDLAND COAL, IRON, AND WAGON COMPANY (Limited).—Capital 100,0002, in 10% shares. To carry on business as a mining company, as well as manufacturing railway wagons, &c. The subscribers are—A. Smith, Derby, 200; J. Manning, Nottingham, 200; W. Berrall, Beulah Hill, S. E., 200; T. Moy, Colches ter; T. H. Boam, Litchurch, Derby, 100; J. A. Warrick, Derby, 100; W. E. Hunt, Derby, 1.

ter; T. H. Boun, Litchurch, Derby, 100; J. A. Warrick, Derby, 100; W. E. Hunt, Derby, 1.
WILLIAM BARRY AND COMPANY (Limited).—Capital 20,000/L, in WILLIAM BARRY AND COMPANY (Limited).——Giptini 20,000,0, in 10l. shares. To acquire a pottery and tile works near Burton on Trent. The subscribers are—W. Barry, Scarborough, 100; T. Daucliffe, Ashby de la Zonch, 100; C. Sendy, Enfield Highway, 50; M. Williams, Lancaster road, Notting Hill, 50; L. Iron, Ashby, 100; R. Trickett, Milwall, 50; T. Thornley, Ashby, 100; and T. Linsdell, Navarino-road, Hackney, 5.

SWANSEA DINAS FIRE-BRICK AND TILE COMPANY (Limited).—

Though the company of the company o

ribers reside at Swansea.
PUBLIC TRADING COMPANY (Limited).—Capital 20,000%, in 5% ares. To acquire mills at Oldham, where the subscribers reside.

RAMSBOTTOM BUILDING AND INVESTMENT COMPANY (Limited).

Capital 30,000/., in 100/. shares, Thia is a Lancashire building company.

MAIDENHEAD WATER WORKS COMPANY (Limited). — Capital

IRON TRADE COMPANY (Limited).—Capital 30,000l., in 1l. shares o carry on business as iron merchants, &c. The subscribers (who take one share ach) are—W. F. Crump, Philpot lane; W. B. Barr, Aldridge street, Surrey square; W. Barnicott, 41, Great Percy street; J. Slubrook, 9, Graeschurch street; A. Keen, Northumberland-terrace, Regent's Park; T. O. Malley, 184, Cornwall pad, Notting Hill; E. Crouch, Euston road.

BREMER MINING COMPANY.—In the report in last week's Mining Journal of the meeting of shareholders of this company some objectionable remarks as to the market being unfairly influenced by certain operators just previously to the time of sending out the telegrams of copper prices to the colonies on the 15th and 30th of each month were made by Mr. Zunz, but he distinctly affirms that it could only have been by inference that the reporter supposed he referred to Messrs. Lazarus and Sons, as he did not mention their name at all, nor had he any intention of stating anything deregatory to ferred to Messrs. Lazarus and Sons, as needed not mention their mane at all, nor had he any intention of stating anything derogatory to them, Messrs, Lazarus's firm having long been honourably known in connection with the Australian copper trade. The Chairman having just previously referred to the Lazarus contract being adopted the result of the proper to be naid for Bropnes. connection with the regulation of the prices to be paid for Bremer will probably explain the interpretation put upon Mr. Zunz's statement.

PRICES OF MATERIALS

At the GREAT WHEAL VOR UN	ITED MINES	during the	follo	wing n	nonti	18:-
Description.	July.		Aug.		Ber	ot.
Coals-bestper to	n., 25s, & 28s.	4d	Time.			
Ironper o	wt. —	********	-	****** **	16s.	Od.
Rope	-	*******	messo		42	0
Nails	No.	*******	-		24	0
Hempper lb	—	*******	****		0	5

CORNISH MINE SHARE MARKET.—The share market has been CORNISH MINE SHARE MARKET.—The share market has been rather quiet during the past week, and a moderate business only has been transacted. As a rule, December is a quiet month in the share market, and this season is no exception. Most of those connected with Cornish mining anticipate a change for the better in the beginning of the new year. In the meanwhile tin keeps quiet at about the same prices as last week. At West Tolgus there has been another breakage (the fourth we believe lately) of the main rod; these frequent accidents are peculiarly unfortunate, as it is situated in a very wet district, and winter as hardly yet began; shares fell to 70, 71, but close slightly better at 70½ to 71½; the main-rods here seem to break so frequently that one would think there must be some mistake somewhere. Dolcoath has declined to about 48, but there is no falling off in the mine. Wheal Peever has fallen to about 5.

main-rods here seem to break so frequently that one would think there must be some mistake somewhere. Dolcoath has declined to about 48, but there is no falling off in the mine. Wheal Peevor has fallen to about 5.

The following are the closing prices:—Botallack, 45 to 50. Carn Brea shares have kept quiet at 54 to 56. Cook's Kitchen shares nothing doing, 8½ to 9½. Dolcoath shares have not been so largely dealt in during the week as in several previous weeks; shares have declined from 49, 51 to 47½, 48½. East Pool shares have been in more request, and have advanced from 8½, 9½ to 10, 10½, at which they close firm; we hear of nothing new in the mine. East Lovell shares called 9 to 10. Providence nominally 4½ to 4½. South Condurrow shares keep steady at 4½ to 436. South Crofty shares have been moderately dealt in at 12 to 11, at which they close. South Frances lower, 14 to 15. 8£. Ives Consols, in absence of ouyers, have declined to about 40s. South Carn Brea shares have further receded to 283., 25s., and but little is doing in them. Tincroft shares have been but little dealt in, and close lower, 28 to 28½. West Basset shares have further failent 1, 7½. West Seton, 22½ to 25, quiet. West Frances, 9 to 10. West Tolgus shares have been largely dealt in, at from 78 down to 7½; they close 70½ to 71½. Kitty (8t. Agnes), 5 to 5½. Wheal Uny steady, 3½ to 3½. Wheal Peevor shares are quiet, at about 5. West Chiverton are called 1½ to 2; the adventurers begin to think there must have been something rotten in the late management, for Capts. Southey and Nancatrow, in their report just issued—Capt. Nancarrow having been the principal underground agent for 10 years and upwards—wrote deliberately to the adventurers, and it has been printed and circulated authoritatively:—"In taking an impartial view of the underground workings at West Chiverton, especially if we look for the continuation of a permanent property, we can only come to the conclusion that the mine has been very unfairly worked, and that the returns of lead have been

Mining Correspondence.

BRITISH MINES.

ABERDAUNANT.—8. Toy, Dec. 9: In No. 2 adit level, driving east, we have met with a cross-head, which has disordered the lode at present.—No. 4 Stope: We have commenced to blast down the north and productive part of the lode, which is worth 13t, per cubic fathom for lead.—Surface: The masons have finished building the slime pits, and we are making fair progress with all other works.

BEDFORD UNITED.—William Phillips, Dec. 10: We are driving by the side of the lode generally. The different stopes continue to look well. We shall be able to report more fully next week.

BELSTONE.—James Neill, Dec. 5: A shaft sunk this week 1 ft. 9 in. The men em aking fair progress in sinking. The strata are still composed of capel, knartz,

of the lode generally. The different stopes continue to look well. We shall be able to report more fully next week.

BELSTONE.—James Neill, Dec. 5: A shaft sunk this week I ft.9 in. The men are making fair progress in sinking. The strata are still composed of capel, quartz, horn, and greenstone, with branches of garnet and lelspar, interspersed with spots of yellow ore and arsenical mundic.—C Shaft: The stope from rise in back of Intermediate level east, on small cross-course, is not so productive as last week; the ground is favourable and congenial, therefore I think it will again improve. I have taken two of the four men wino were in this stope, and removed down to the back of the level to take off another stope, and bring up to take the some run of ore ground we have just passed through, and I expect a productive stope.

— Dec. 9: The stope from rise, in back of Intermediate level, has again improved, and we have met with some good nests of ore to day. The ground is very favourable, and I hope to see it as productive as it was a few weeks since. The sinking at A shaft is going on all right, and the machinery working well.

BOG.—W. T. Harris, J. Barkell, Dec. 9: Underground operations are making usual progress, and the prospects quite equal to last report. Dressing and other surface work are much delayed by the boisterous state of the weather.

BOWDEN HILL.—J. Goldsworthy, Dec. 9: The ground in the adit level is becoming strongly impregnated with iron stains, which is a favourable indication on nearing the manganese-bearing ground. The progress now being made is favourable; we look forward to meet with good results as soon as we properly enter the real manganese-bearing stratum. We have communicated an air-shaft to the adit. This shaft will be available for air-pipes when required, and give us good ventiation introngliout the drivage.

CAEGYNON.—I. Hodge, Dec. 9: In the 70 east I think the south cross cut is through the south lode, at all events we have slatey rock in the breast; the vein altogether is 6 ft.

In the adit level, west from Doctor's engine-shaft, we have cut through the c.pel on the north or footwall, and are now opening south, intending to reach the elvan course.

COURT GRANGE.—E. Dunkin, Dec. 10: There has been no alteration in the lode in any part of the mine since my report of the 3rd instant. The men are making good progress in cutting plat in bottom of New Broginan shaft, so that very shortly we shall commence the opening of the 12 in the castern workings, where our chances of success are very promising. Drawing stuff in the western nine has begun, and in a few days the places will be cleared sufficiently to enable us to resume stoping in the 16 vigorously. Next week I purpose giving a report on the 49, which is drained. The remaining 10 fathoms of water will soon be forked, as the drivages and stopes are but limited in the 50, from reports of those who knew the mine, and formerly worked in the bottom level.

CWM DWYFOR.—J. Jewell, Dec. 10: Having met with a little softer ground, fair progress is being made in driving the No. I level, east of the south cross-cut, and the lode is looking better for the production of lead ore. The other bargains are without alteration since my last report. The machinery and pitwork throughout the mine are in good working order.

DE BROKE.—T. Hodge and Son, Dec. 9: We see no change in any of the bargains since our last. At Wilson's good progress is being made in sinking. We shall be taking down the lode in the stope in back of the 25, on the caunter lode, on Friday. We have wet and stormy weather, which rather impedes our progress at surface. Saturday next is our setting-day, when a full report shall be sent. We sold to-day 12 tons of lead, at 14. 15s. per ton.

DEERPARK.—J. Gollsworthy, J. Bucknell, Dec. 5: We have cut a branch in the cross cut south of the engine-shaft; there is an increase of water, a few days will prove what it is. The lode may have gone down nearly perpendicularly; it so we shall have some distance yet to drive. It is not an uncommon occurrence

The 66 west looks much better than we have ever seen it, and, in my opinion, we shall soon meet with a course of ore here. We hole to sell a parcel of lead ore next week.

DEVON GREAT CONSOL3.—Jas. Richards, Dec. 10: Wheal Emma: Railway Shaft, New South Lode: In Dart's winze, sinking below the 145 east, the lode is 3½ ft. wide, and is still worth 3 tons of ore, or 15/., per fathom. In Kitto's winze, below the 116 west, the lode proving 5½ ft. wide, is worth 3 tons of ore, or 12/., per fathom.—New Shaft, New South Lode: This shaft is in regular course of sinking below the 145, by a full force of men, and the ground admits of fair progress being made. The south part of the lode proves to be 18 in. wide, worth from 1 to 2 tons of ore per fathom for the length of shaft, or 10/. per fathom. This looks encouraging, the north and leading part of the lode being still to the north of the shaft. In the 145 east the lode is still large, 5 ft. of which being carried continues a fine course of ore, worth 12 tons, or 72/., per fathom. In the 139 east, on the north part of the lode, the lode, or 4 tt. thereof being carried, is worth 4 tons of ore, or 24/., per fathom. In Castle's winze, below the 130 east, the part of the lode carried (2½ ft. wide) is worth 4 tons of ore, or 24/., per fathom.

BIAKE WALLS.—W. Skewis, E. Dunstan, Dec. 1: Mathew's Shaft: In the 40 east the lode is 12 ft. wide, and worth 12/. per fathom.—South Lode: The stope in the back of the 50 is worth 14/. per fathom. In the rise in the back of the isole is worth 18/. per fathom, and in No. 2, or the western stope, the lode is worth 14/. per fathom. In the back of the sworth 18/. per fathom, and in No. 2, or the western stope, the lode is worth 18/. per fathom. In the back of this level the lode is worth 18/. per fathom. This we expect to commanicate with the winze below the 50 in about a fortnight from this time. This will lay open a valuable piece of this ground for stopping. We are driving a cross-cut at the 70 to intersect this lode again, and hope to d

Is to be communication. It is also become the sales of the will be increased.

DUCHY GREAT CONSOLS.—J. Richards, Dec. 7: South Maria: In the 70, west of engine-shaft, which is being driven by the side of the lode, the ground is favourable for progress, and is also congenial for mineral.—Latchley Consols: In the 80 east, and east of Ellis's winze, the drivage is also by the side of the lode, and the ground admits of fair progress being made. These two points are pushed on as fast as the nature of the work will admit, in order to effect a communication between the two mines in the least possible time. In the 74, west of Ellis's winze, the lode is 4 feet wide, composed of capel, quartz, mundic, and ore worft 2 tons per fathom. The lode in the stope in the bottom of the 50 east, west of Dingle's winze, is worth 2 tons of ore per fathom, and in the stope to the east of the winze the lode is worth 2½ tons of ore per fathom. We sampled on Friday last 36 tons of ore, for sale on the 17th instant.

EAST WHEAL BASSET.—Richard Pryor and Son, Dec. 9: We have no change to notice in any of our tutwork or tribute bargains throughout this mine since our last report. On Tuesday next we propose sampling our copper ore.

of ore, for sale on the 11th metals.

EAST WHEAL BASSET.—Richard Pryor and Son, Dec. 9: We have no change to notice in any of our tutwork or tribute bargains throughout this mine since our last report. On Tuesday next we propose sampling our copper ore.

EAST WHEAL GRENVILLE.—E. Hosking, W. Bennetts, Dec. 5: Setting Report: The 130, to drive west of engine-shatk, by six men, at 8l. per fathom; the lode is 2 ft. wide, and worth 6l. per fathom. We hope soon to have a change in this end for the better, looking at the favourable ground in the level above. To rise above the 130, west of engine-shaft, by two men, at 7l. per fathom; the lode is 2 ft. wide, and worth 6l. per fathom. To sink a winze below the 120 west of engine-shaft, by two men, at 6l. per fathom. To sink a winze below the 120 west of engine-shaft, by two men, at 6l. per fathom. The 120 cross-cut, to drive north, by two men and one boy, at 7l. 10s. per fathom. The 130 cross-cut, to drive south, by four men, at 4l. 10s, per fathom. To rise above the 110, east of cross-course, by six men, at 8l. per fathom; the lode is 2 ft. wide, and worth for tin and copper ore 12l. per fathom. To stope below the 98, east of cross-course, by two men, at 3l. per fathom; the lode is 2 ft. wide, and worth 6l. per fathom. We have also set six pitches, to twelve men, at an average tribute of 12s. 4d. in 1l., the tributers to be paid at the rate of 50l. per to for black tin.

EAST WHEAL LOVELL.—R. Quentrall, Dec. 9: Fathork: The lode below the 100 is looking quite as well as last reported on, and from present appearances, and some very rich stones of tin towards the western end of shaft, I think it is likely to still further improve.—Tregonebris: The lode in the 34 east, and in the winze sink ing to this level, is worth from 20/t. to 28l. per fathom. We have cleared the old workings below this adit westward, referred to in my report of the 11th ult., and have set to six men to sink below at 8l. 10s. per fathom we have leared the 6l workings below this adit westward, referred

my next report.

FLORENCE CONSOLS (Tin).—P. Skewis, Dec. 8: The stopes at the 66, Eliza's shaft, have been holed through to the 76, so that we can now break the stuff cheaper FLORENCE CONSOLS (Tin).—P. Skewis, Dec. 8: The stopes at the 66, Eliza's shaft, have been holed through to the 76, so that we can now break the stuff cheaper and faster; in doing this we rose on the back of the 76 from the branch from the south side of the Millpool standard lode, which runs on the south side of the horizon the south side of the Millpool standard lode, which runs on the south side of the horizon the stating out, and which runs through the shaft where we are sinking, and the plat on the other side of it; and this is the branch also which has gone down below the 76, and will be under water until the shaft is deep enough for us to drive or sink on it; we believe that this branch is merely a split of the Millpool standard, which will again form good work on a larger extent as we go down. The end of the 60 west, on the Millpool standard, has made a great turn to the south in the last two or three days, and we seem to be very near the lode we have been expecting to intersect, as the ground is changing much and letting out water very fast. At the 60 cross cut from Walter's the end is still very hard, with large branches of jack, spar, copper, and mundic crossing it, so I think the lode cannot be far off, and that it will prove very rich when we cut it, for the jack is very strong. At the 40, north of Eliza's shaft, in driving on the lode we before reported, we have in-

tersected another richer and larger lode crossing it at almost right angles; the lode

tersected another richer and larger lode crossing it at almost right angles; the lode is from 2 to 3 ft. wide, and from its direction appears to be the well known South Great Work, or Celenia lode, and if so, we can easily cut into it from Walter's shaft, at the 76, to which we are fast sinking, and soon be down to. All other parts of the mines are much the same as when last reported on FURZE HILL.—W. Doidge, Dec. 10: No. 1 North Lode: We have not yet cut the lode cast of the cross-course in midway level, from Bell shaft, although? fms. have been driven south from the point of intersection on the west, thus showing a larger heave than any previously seen in the mine. The ground by the side of the cross-course is still very congenial for the production of in. The stopes throughout the mine are much the same as for some time past. We shall have another parcel of in ready for the market by the middle of next week, computed 4 tons. GAWTON COPPER.—George Rowe, George Rowe, jun., Dec. 5: The north part of the lode carried in the 117, east of King's engine-shaft, is 5 ft. wide, producing very strong mundic, and fine stones of ore. The ground in cross cut driving south at the 117 west is of a good description for minerais, and our progress satisfactory. The lode in the stopes in the back of the 95 is worth 6!, per fathom. The lode in the stopes in the bottom of the 52 is worth 9!, per fathom. The stopes in the bottom of the 70 is worth 10!, per fathom. The lode in the rise and stope in the back of the 70 is worth 10!, per fathom. The lode in the rise and stope in the back of the 56 is worth 9!, per fathom the back of the 57 is worth 10!, per fathom. GLYN.—James Roach, Dec. 10: Discovery Shaft: We have brought up drains, cleared shallow adit level, and thoroughly timbened the shaft to that depth, about 5 fms. In a few days we shall have cut ground, hung the windlas at the adit, and proceeded with the deepening of the shaft underneath; therefore I hope to get low enough to see the ore said to be intersected in the cross

of the fo is worth 12t. per fathom. The lode in the rise and stope in the back the folia worth 14th. Per fathority of the folia of the

junction, south of shaft, by four men, at 4. los. per fathom; the loue's worth 1½ ton lead ore per fathom. The masons are getting on slowly, owing to the frost, &c. NANT-Y-RONEN CONSOLS.—Rich. Couch, Dec. 5: We have taken down the lode in the engine-shaft this week at West Nant-y-Ronen, and our prospects here I consider have much improved. The lode is 2½ ft. wide, of which the south part is yielding saving work jof dredge lead ore, and it is a strong, masterly lode. In West Nant-y-Ronen cross-out yesterday we met with a slide, coated thickly with mundic; now, seeing that the lode in its ordinary direction is a little before us, I fully expect very shortly to have the pleasure of reporting a considerable improvement in this part of the mines. The engine is working well, and altogether our prospects are very encouraging.

NEW CONSOLS.—R. Pryor, T. Jonkin, H. Vial, Dec. 8: In our underground operations there is no change to notice since last report. Everything at Broadgate is ready for starting to work, and at surface the masons are making good progress, less feather than the surface the masons are making good progress (see a start of the property shall be sent to you, as usual.

is ready for starting to work, and at surface the masons are making good progess.

Next Saturday being our pay and setting day a full report shall be sent to yon, as usual.

NEW PEMBROKE.—F, Puckey, C. Merratt, Dec. 7: In the 120 cross-cut, driving north of the engine shaft, to intersect the main lode, the ground is favourable for progress. In the 110 end, driving east of the shaft, the lode is about 3 feet did, and at present producing low quality tinstuff. In No. 1 stope in the back of the 110, cast of the shaft, the lode is 3 ft. wide, and worth 8/, per fathom. In the 100 end, driving east of the shaft, the lode is 4 ft. wide, and worth 8/, per fathom. In the 100 end, driving of the lode is 5 ft. wide, and worth 8/, per fathom. The north part of the lode cutting out behind the end is 3 ft. wide, and worth 8/, per fathom. The north part of the lode cutting out behind the end is 3 ft. wide, and worth 20/, per fathom. In No. 1 stope in the back of the 100, east of the shaft, the lode and branches for 61 ft. wide, and worth 20/, per fathom. In No. 2 stope the lode is 7 ft. wide, and worth 20/, per fathom. In No. 4 stope the lode is 4 ft. wide, and worth 12/, per fathom. In No. 4 stope the lode is 4 ft. wide, and worth 12/, per fathom. In No. 4 stope the lode is 4 ft. wide, and worth 12/, per fathom. In No. 4 stope the lode is 6 ft. wide are worth 21/, per fathom. In the 90 end, driving east of the shaft, the lode is 3 ft. wide, yielding saving work for fin, and presenting a kit. 1/4 paperance for further improvement. In the rise in the back of the same level, belyind the end, the lode is 2 ft. wide, but unproductive for mineral. In No. 1 stope, in like back of the 90, east of the winze, the lode is 8 ft. wide, and worth 45/, per fathom for copper ore. In No. 3 stope, west of the winze, the lode is 6 ft. wide, and worth 45/, per fathom for copper ore. In No. 3 stope, east of the winze, the lode is 1 ft. wide, and worth 45/, per fathom for copper ore. In No. 3 stope, east of the winze, have a summary and the stope

to take away the stuff. The lode in No. 2 west level has slightly improved, and the ground more congenial for the production of ore, now worth 15 cwts. per The trial level, going out of No. 2 east, has been driven I7 yards; the lode in the end does not look quite as well as formerly, now producing 1 ton of ore per fm. I regard the falling off as only temporary, as the character of the ground remains unchanged, and, no doubt, will soon resume its former productiveness. Opposite this level we have driven about 12 yards; the lode in this end varies considerably sometimes producing from 2 to 3 tons per fathom, and then falling off to 1 ton, which is its present value. The level on the new discovery has been holed to No. 2 east, as anticipated, and the men are now engaged stoping away the roof, where we left a dittle lead. To-day we sold 30 tons of ore to Mr. Eyton, at 15/. 17s. 6d. per ton wet weight, and on the mine.

NORTH POOL.—W. C. Vivian, F. Clymo, Dec. 10: In the 40 cross-cut we have inst passed through a breast-head, which is quite vertical, and on the outer surface as smooth as a wall. We have to-day cut into the country south of this head about 3 ft., and find the water issuing very strongly from the rock, which is marked more strongly by the characteristics which we have for some time been calling attention to in our reports, and which we consider as very favourable, indicating its congenial nature for the production of copper. The quantity of blende which the rock contains is greater than it has ever before been, and the dark green chlorite (miners' peach), which forms the matrix of the blende, constitutes also the greatest part of the bottom part of the shaft is completed, and the ladders reset, and also the whim repaired. The driving through.

NORTH PRINCE PATRICK.—John Jones, Dec. 10: As mentioned in my last report, the partition at the bottom part of the shaft is completed, and the ladders reset, and also the whim repaired. The driving through.

NORTH TRESK EBBY.—R. Pryor and Son, Dec. 9: During the

report, the partition at the bottom part of the shaft is completed, and the ladders reset, and also the whim repaired. The driving along the silver rake vein continues to improve gradually.

NORTH TRESKERRY.—R. Pryor and Son, Dec. 9: During the past week the driving of the deep adit cross-cut, north of new shaft, has continued in the new lode; we have cut into this lode full 9 ft., and so far there is no indication of our reaching the other or hanging-wall. The appearance of the lode is certainly all that can be looked for, being that of a masterly tin-producing lode. We hope very shortly, by means of our new water stamps, to return some tin from the stuff that is being broken in cutting through this lode. All other places without change to notice since our setting report of last week.

OLD BATHOLES.—A. Waters, Dec. 10: The sinking of the new shaft on the mountain is suspended, owing to a great influx of water, and the men are now engaged bringing up an adit level, starting from a point about 50 fms. from shaft.

OLD BOTTLE HILL.—R. Unsworth, Dec. 9: The following was our setting on Saturday: The 48, east of Rowe's shaft, to three men, stented to hole, at 80s, per fm. In the 46, east of Rowe's shaft, to three men, stented to hole, at 80s, per fm. In the 46, east of Rowe's shaft, to three men, stented to hole, at 80s, per fm. In the 46, east of Rowe's shaft, to three men, stented to thole, at 80s, per fm. In the 46, east of Rowe's shaft, to three men, stented to the sidivided into branches, at present poor. In winze in the bottom of the 36, east of Rowe's shaft, to three men, stented to the start of the per shaft, the lode is 21st wide, producing saving tinstone. In the 10 west the lode is 11st. wide, good saving tinstone. In the 10 east, on the south lode, the lode is 21st. wide, producing saving tinstone. In the 10 west the lode is 11st. wide, good saving tinstone. In the 10 east, on the south lode, the lode is 11st. wide, good saving tinstone. In the 10 east, on the south lode, the lode is 11st. wide, good sa

in wide, producing average quality tinstone. In the 10 east, on the south lode, the lode is 1 ft. wide, good saving tinstone. We are now preparing some parely sind tinstone for sale, of which I will inform you as soon as possible as to quantity and value.

OLD TREBURGETT.—W. Hancock, W. T. Bryant, Dec. 9: The engine-shaft is sunk 9 ft. below the tip plat at the 90; the lode in it is 2½ ft. wide, producing occasional stones of silver-lead, with a kindly appearance to improve as we descend. The men are now engaged cutting ground for cistern plat preparatory to fixing lift, bringing down two pieces of main roads, &c.; when completed sinking will be resumed by a full pare of main roads, &c.; when completed sinking will be resumed by a full pare of main roads, &c.; when completed sinking will be resumed by a full pare of main roads, &c.; when completed sinking will be resumed by a full pare of main roads, &c.; when completed sinking will be resumed by a full pare of main roads, &c.; when completed sinking will be resumed by a full pare of main roads, &c.; when completed sinking will be resumed by a full pare of main roads, &c.; when completed sinking will be resumed by a full pare of main roads. At the full pare of the same level north, by four men, one month, at 9. per fathom; worth about \$\ell, per fathom; worth 3\ellies per fathom in No. 2, by four men, one month, at 3\ellies per fathom; worth 3\ellies per fathom. No. 3, by four men, one month, at 3\ellies per fathom; worth 3\ellies per fathom. No. 4, by four men, one month, at 3\ellies per fathom; worth 3\ellies per fathom. No. 4, by four men, one month, at 3\ellies per fathom; worth 3\ellies per fathom. No. 4, by four men, one month, at 3\ellies per fathom; worth 3\ellies per fathom. To, 5\ellies per fathom, and down down to water, and stope about 10 fathoms behind the end, one month, to six men, at 4\ellies per fathom. The ground stope about 10 fathoms behind the end, one month, to six men, at 4\ellies per fathom. In the 7\ellies one has a per six per six per si

mine to eighte-ment. For two months, at about an average of 17t. per ton for No. 1 quality ores, and 10t. per ton for No. 2, dressed. The tramming, filling, and landing for two months by the same number of men as last time, and at about the same price per nomth.

PARYS MOUNTAIN.—T. Mitchell, Dec. 10: There is no alteration of importance this week. The stopes at the 50, west of cross-course, are still disordered by chert rock, but we hope soon to see this work out again as we stope westward. We have since setting day set another tribute pitch in the bottom of the 65, which is now looking very promising, and likely to do well.

PEDN-AN-DREA UNITED.—W. Tregay, W. Prideaux, J. Pope, Dec. 5: Sump: The lode in the 160 west end (Martin's) is just as laso reported, producing about 10t, worth of tin per fathom. In the 150 west end, the lode (Martin's) is worth 152, per fathom. In the 140 east winze the lode (Martin's) is worth 30t, per fathom. In the 140 east winze the lode (Martin's) is worth 30t, per fathom. In the 120 west end the lode (Martin's) is worth 15t, per fathom.—Cardoxo's: In the 90 west end the lode (Martin's) is worth 15t. per fathom.—In the 60 fathom level west end the lode (morth) is worth 15t, per fathom. In the 60 fathom level west end the lode (morth) is worth 15t, per fathom. In the 60 fathom level west end the lode (morth) is worth 15t, per fathom. In the 70 west end the lode (morth) is worth 10t, per fathom. In the 47 west end the lode (morth) is worth 10t, per fathom. In the 47 west end the lode (morth) is worth 10t, per fathom. In the 47 west end the lode (morth) is worth 10t, per fathom. In the 47 west end the lode (morth) is worth 10t, per fathom. In the 47 west end the lode (morth) is worth 10t, per fathom. In the 47 west end the lode (morth) is worth 10t, per fathom. In the 47 west end the lode (morth) is worth 10t, per fathom. In the 47 west end the lode (morth) is worth 10t, per fathom. In the 58 west end the lode (morth) is worth 10t, per fathom. In the 50 west end the lode (morth) is wor

Davis slode. The ground in the engin shaft is harder than it has been, but we are continuing the sinking by twelve men as rapidly as possible. The lode in Clyjah whim-shaft yields good stones of copper ore, and the ground is easy for sinking.

PRINCE OF WALES.—J. Gifford, J. Pryor, Dec. 8: On Saturday the following bargains and pitches were set:—The 77 east to drive by six men, stent 4 fms., at 8t, per fathom, and to have 10s. per fathom extra if the 4 fms. are driven by 3an. 2 next. The lode in the end is 1 ft. wide, composed of caspel and quartz, with spots of arsenical mundic and copper ore int:rmixed, but not to value. The character of the killas by teside of the lode is a!! that can be expected for the production of good deposits of copper ore. The 56 east to drive by four men, at 11t. per fathom; here the ground is very hard, but from appearances we hope it will soon improve. The lode is 1½ ft. wide, yielding occasionally good stones of copper ore, not to value. The rise in the back of the 65 east is up 10 fms. In the last 5 fms. the lode is unproductive, and in the highest place it is split up into small strings or branches. This point is suspended. A cross-cut north from Bilver lode, at the deep adit, by two men, stent 1 fm., at 5t. 10s. No. 1 pitch, back of the 77 east, by two men, at 8s. in 1t. No. 2 pitch in the back of the 67 fms. In the back of the 65 east, by two men, at 10s. in 1t. No. 2 pitch in the back of the 68 east, by two men, at 10s. in 1t. No. 2 pitch in the back of the 68 east, by two men, at 10s. in 1t. No. 2 pitch in the back of the 68 east, by two men, at 10s. in 1t. No. 2 pitch in the back of the 68 east, by two men, at 10s. in 1t. No. 2 pitch in the back of the 68 east, by two men, at 10s. in 1t. No. 2 pitch in the back of the 68 east, by two men, at 10s. in 1t. No. 2 pitch in the back of the 68 east, by two men, at 10s. in 1t. No. 2 pitch in the back of the 68 east, by two men, at 10s. in 1t. No. 1 pitch, in the back of the 65 east, by two men, at an average tribute of 11s. 5d. in

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fathom. No. 1 stope, in the 80, north of the said winze, by six men, at 6l. 10s. per fathom, worth 3 tons per fathom. The stope in back of the middle level, south of Precee's, by four men, at 5l. 10s. per fathom, worth 2l tons per fathom. No. 2 stope, south of ditto, by four men, at 6l. 10s. per fathom, worth 2l tons per fathom No. 1 stope, in back of the middle level, south of Corfield's, by four men, at 6l. 5s. per fathom. The stope in the same level, north of Corfield's, by four men, at 6l. 5s. per fathom, worth 4 tons per fathom. No. 1 stope, in the fo fathom level, north of Powell's winze, by two men, at 6l. 5s. per fathon, and at present worth 2 tons per fathom. No. 2 stope, north of ditto, by six men, at 6l. per fathom, worth 3 tons per fathom. No. 1 stope, in the 80, south of the said winze, by four men, at 6l. 5p. pr fathom, worth 2 tons per fathom. The new south engine-shaft to sink below the 65. by nine men, at 10l. per fathom. The new south engine-shaft to sink below the 65. by nine men, at 10l. per fathom. The new south of the said winze, by four men, at 8l. 5s. per fathom, worth 2 tons per fathom. No. 2 stope, south of ditto, by four men, at 8l. 5s. per fathom, worth 3 tons per fathom. No. 2 stope, south of ditto, by four men, at 8l. 15s. per fathom, worth 2l tons per fathom. No. 3 stope, south of ditto, by four men, at 8l. 15s. per fathom, worth 2l tons per fathom. No. 3 stope, south of ditto, by four men, at 8l. 15s. per fathom, worth 2l tons per fathom. No. 3 stope, south of ditto, by four men, at 8l. 15s. per fathom, worth 2l tons per fathom. No. 3 stope, south of ditto, by four men, at 8l. 15s. per fathom, worth 2l tons per fathom. No. 3 stope, south of ditto, by four men, at 8l. 15s. per fathom, worth 2l tons per fathom. No. 3 stope, south of ditto, by four men, at 8l. 15s. per fathom, worth 2l tons per fathom. No. 3 stope, south of ditto, by four men, at 8l. 15s. per fathom, worth 2l tons per fathom. No. 3 stope, south of the result of the stope stope stope stope stope stope stope stope sto

is cannot now be examined at this 20, which is the deepest point. Wood's lode has being sunk below the 25, the ground is much more favourable for sinking, and greater progress being made. In the western drivage the lode is worth 112, per the river will be communicated from the 25 to the 15, this will open up good tribute ground, and large sections may be taken away. The Great Work lode in the 25 to the 15, this will open up good tribute ground, and large sections may be taken away. The Great Work lode in the 25 to the 15 this will open up good tribute ground, and large sections may be taken away. The Great Work lode in the 25 to the 15 this will open up good tribute ground, and large sections may be taken away from the 20 has been communicated with this level, and one pitch has been set at 55, in 12. In the 10 west we have a large and weld-defined lode, and yelds that the 35 this will be a section of the and improving.

SOUTH PINIO PI

to a fathoms.

TRELEIGH WOOD.—E. Hosking, W. Goldsworthy, Dec. 9: There is no change to notice in the mine since our report for the meeting on Wednesday last. The engine continues to keep the water, which is now quite 12 strokes per minute.

TREVARRACK.—James Pope, Dec. 9: The engine shaft is 14 fms. 2 ft. below the 60; the lode is 3 ft. wide, composed of peach, mundic, and iron, with stones of tin. We have now commenced to drive the 74 east, where the lode has the same appearance. We shall now cut plat in that level, bring down skip road, and prepare for sinking below at once. In the 60 east the lode is 2½ ft. wide, composed of peach, mundic, and iron, with a little tin—a very kindly lode.

TYLLWYD.—Capt. Paull, Dec. 10: The lode in the 30 east the south-west level is 6 feet wide, containing spar, clay slate, and lead ore, and will produce fully 1 ton 5 cwts. of the latter per fathom. The lode in the 20, west of cross cut, is 2 ft. 6 in. wide, and will yield 15 cwts. of lead ore per fathom. Her cross cut, is 2 ft. 6 in. wide, and will yield 15 cwts. of lead ore per fathom. Her ware pushing on towards the shaft at mouth of level as fast as possible, in order to lay open the section of ore ground, and also to ventilate that part, when we shall be able to resume the sinking of the engine shaft another 11 or 12 fms., to get under the present bunch of ore gone down in the bottom of this level, which we have already gone through 16 fms., and by all appearance this will improve in the next level. Our operations in erecting the dressing machinery are being urged on with all possible dispatch. Machinery all in good order, and going well.

VAN CONSOLS.—James Roach, Dec. 10: No. 0 winze, under the 15, has been sunk as deep as the 25. We are now placing ladders therein, and preparing for driving cast therefrom, which we expect will soon be into lead ore of notable value. No. 1 winze, under the 15, is 7½ fathoms deep, and re-let at 8½. 8s. per fathom; this is yielding solid stones of ore, and a mixture throughout; the width of the lode now carried yielding ½ a ton of lead per fathom. In the 25, west of No. 2 winze, we have commenced cutting down lode, by six men; this is, as far as sen, producing some 2½ tons of lead per fathom. I shall sink a winze under the

shalt is progressing articles. The share got a number of tons of lead ore on the floors, which we are cleaning for market. Of barata we have 15 to 20 tons ground, and will send you a sample in a day or two.

VAUCHAN.—Dec. 7: In the deep adit level east the part of lode being carried is 5ft. wide, principally composed of a light clay-state and carbonate of lime, containing spots of mundic, and good progress in driving is being made.

WEST SEGAIR LLE.—R. Harvey, Dec. 10: The bargains throughout both mines maintain the value as reported last week. The whole of the machinery is in good working order, and dressing going on regularly.

WEST GODOLPHIN.—John Pope, Dec. 5: Caunter Lode: Pressure shaft is down, cased, divided, &c., to the 60 fm. level. We have commenced to drive north and south. The lode in the 50 south is worth 6'., in the 40 north 9'., per fathom. The 30 south produces a little tin. The stopes in the back of the deep adit are worth 4'. per fathom. On South Hope lode we can do nothing at present from surface, the water having risen in Wilson's shaft to within 3 fms. of the surface; but in the deep adit, east of caunter, we have a lode 18 in. wide, producing low-price tinstuff. Machinery all working well.

WEST GREAT WORK.—Samuel J. Reed, Dec. 9: We have been costeaning and removing earth to commence the new shaft on No. 2 lode; it is intended to sink this shaft a little more than 50 fms. west of the skip-shaft. In the deep adit we have now a fine-looking lode, with a good leader of tin, and when the new shaft has been sunk to that level we can open up ground much faster than at present. The prospects in this part are very encouraging, and I propose pushing on the work so as to get a communication with the deep level as soon as possible. Weare diving west from Watson's shaft, on the Great North lode, where good tinstuff is being broken, the lode being worth 10', per fathom, and then the head shaft is being cleared below this point.

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WHEAL UNY.—Wm. Rich, M. Kogers, W. Rich, jum., Dec. 5: We have about 2 fms. further to complete Hind's engine-shaft to the 190. The 160, west of engine-shaft, carries a little tin. The 160 end east is worth 7l, per fathom. The rise in the back of the 150, towards Incline shaft, is worth 7l, per fathom. The 180 east is worth rich per fathom. The 180 east is worth rich per fathom. The 180 east is worth 16l, per fathom. The 190 east is worth 16l, per fathom. The 190 east is worth 16l, per fathom. The 10 east is worth 16l, per fathom. A power of the per fathom with the per fathom. A power of the per fathom with t

TREATING LEAD.—According to the invention of Messrs. Luck ox, and Rozan, of Marseilles, air, or other compressible gas, is employed in place of steam for oxidising the impurities of the lead, and producing its ebuiliton, and

consequent crystallisation, the air or gas being forced in through a pipe passing horizontally into the caldron containing the lead near the bottom thereof. The pipe is provided with a cock or valve for regulating or cutting off the supply of

With this week's Journal a SUPPLEMENTAL SHEET is given, which contains—Original Correspondence: Co-operative Collieries; A Miners Agent on Co-operative Collieries: Government Inspection of Collieries; Machinery as Applied to the Underground Workings of Mines, Rock-Boring Machinery (T. Brown and Co.); Diamond Rock Boring; Doubtful Minerals, Mineralogy (W. White); Meteorology—the coming Winter; What is Electricity (R. J. Crickmer); Mining in Cardiganshire, and the Van and Van Consols in Montgomeryshire (A. Francis); Cardiganshire Mines—the Talybont District; Mining Association for Bhropshire: Roman Gravels Mine; Bouth Condurrow Mine (E. Skewis, W. Leach); Old Talargooh Mine (T. Sarrett); West Chiverton Mine (T. Smith); South Wheal Frances (A. Clarke); Bt. John del Rey Mining Company (J. Hockin); Richmond Consolidated Mining Company; New Quebrada Company (F. H. Hemming).—Temporary Ventilation of Mines, and the Portable Guibal Fan—Foreign Mining and Metallurgy—Meetings of the Crenver and Abraham, Assekton, Great Fron Fownog, Russia Copper, Tolima, Blue Tent Consolidated, South Roman Gravels, and Wheal Mary Companies. With this week's Journal a SUPPLEMENTAL SHEET is given

The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET-LONDON, DEC. 11, 1874.

AL LIL	LD MARIE BONDON, DROTTE, TOTAL
COPPER. & s. d. & s. d.	IRON. per ton. & s. d. & s. d.
Best selectedp. ton 96 0 0- 97 0 0	
Tough cake and tile. 94 0 0- 95 0 0	
Sheathing & sheets 98 0 0-100 0 0	Nail rods 9 10 0
Bolts101 0 0-102 0 0	
Bottoms100 0 0-102 0 0	
Old 87 0 0- 90 0 0	
Australian, Waliaroo 95 0 0-	Bars ,, at works 10 0 0-11 0 0
ditto other brands 93 0 0- 93 10 0	
Chili bars, g.o.b 85 0 0-	Sheets, single, & plates 12 15 0-14 0 0
Wireper lb. 0 1 1-	Pig No. 1, in Wales 5 0 0-6 10 0
Pubes 0 1 2- 0 1 3	
I HDCs	Bars, common, ditto 8 0 0-8 5 0
BRASS. per lb.	Do merchant (o b)
Sheets 91/4d10d.	in Tyne or Tees 8 10 0-
Wire 9½d10d.	De 1 1- 187-1 # 0 0 = -
Tubes 12d121/d	Do., Swed. in London.16 0 0-17 0 0
Yellow metal sheathing 83/4d9d.	To arrive
Sheets 81/4d81/4d.	Pig, No. 1, in Clyde 4 7 0-5 12 6
	Do., f.o.b. Tyne or Tees 4 0 0-4 5 0
Foreign on the spot., 23 15 0-	Do., Nos.3,4, f.o.b., do. 3 10 0-4 0 0
A	Railway chairs 5 0 0- 5 5 0
,,	,, spikes12 10 0-14 0 0
ZINC.	Indian Charcoal Pigs,
In sheets 30 10 0-31 0 (in London, p. ton 8 0 0-10 0 (
TIN.	
English blocks £ 98 0 0- 99 0 0	BTEEL. per ton.
Do., bars (in brls.) 99 0 0-100 0 0	Swed., in kegs (rolled)
Do., refined 101 0 0-102 0 0	Ditto (hammered)19 0 0-20 0 0
Banca 100 0 0-101 0 0	Ditto, in faggots20 10 0
Btraits 92 10 0	English, spring19 0 0-24 0 (
Australian 91 10 0	LEAD. per ton.
TIN-PLATES.* per box.	English Pig, com24 0 0
IC Charcoal, 1st qua. † £1 18 0- —	Ditto, L.B24 0 0
IX Do., 1st quality 2 4 0	Ditto, W.B24 10 0
IO Do., 2d quality 1 16 0- 1 17 0	Ditto, sheet25 0 0
IX Do., 2d quality 2 2 0-2 3 6	Ditto red land or o o
10 Coke 1 7 6-1 8 6	Ditto, white30 0 0-32 0 0
IX Ditto 1 13 6- 1 14 6	Ditto, patent shot26 10 0-26 15
Canada plates, p. ton 18 10 0-19 0 0	General Co. F. C. Co. C.
Ditto, at works 18 0 0-18 10 0	QUICKSILVER (p. bot.) 25 0 0
* At the works, 1s. to 1s. 6d. per to	less. † Add 6s. for each X.
Terne-plates 2s, per box belo	ow tin-plates of similar brand.

REMARKS.—Throughout the past week no great change has taken place in the demand for or in the value of metals generally. Considering the existing high rate for money, and the uncertainty which overhangs the future of the money market, our markets continue in a healthy state, and, on the whole, satisfactory. It is true that no a healthy state, and, on the whole, satisfactory. It is true that no great disposition is evinced on the part of buyers generally at the moment to come forward and operate on an extended scale, yet each day's transactions show that the necessities of trade compel a fair amount of business to be concluded. Prices are now, as a rule, sufficiently moderate to prove inviting to buyers, and were the money market in a more satisfactory condition, or the future course which it may take less uncertain than it is, there would probably be a larger amount of business transacted than has been the case during the past week or two. It would be well to bear in mind that stocks, as a rule, are low, and prices moderate; and that, although trade for a long time past has been comparatively dull, yet quotations have not shown any marked tendency to droop to a serious extent, so that perhaps the lowest ebb in prices has been already reached; and, should there be a reaction, it may probably be sharp, and intending buyers may find that they may have delayed a little too long. The pause which from one cause or another has occurred may only be a pause preparatory to more vigorous action, and there are no reasons, so far as can now be discerned, for doubting the correctness of the generally received opinton that next year will be marked by an important and a prolonged resusciation of business.

COPPER.—The transactions reported during the week have been

COPPER.—The transactions reported during the week have been limited, and the market has been quiet, but steady. This was what might have been expected, all things being considered. During last week a considerable amount of copper was purchased. The high rate of money, and the uncertainty which overhangs the future of the money market, effectually puts a stop to all thought of speculation, and as the year draws towards its close the tendency is rather to contract than to extend operations. We can but repeat that the market is inherently sound; there may be slight fluctuations in quotations from day to day until business arrives, which it may do at any moment, notwithstanding the causes above referred to, but we certainly do not anticipate that the market will be affected beyond very trifling limits. In looking through the statistics of shipments of copper to the East, it appears that a very large quantity remains to be made up, as present deliveries are much below those of former years. It is possible that circumstances may have to some extent altered the position of the Indian copper market as compared with former years; the same amount may not be required for sheathing purposes, and Australian copper may find its way to India in the form of cake and ingot, but manufactured copper must still be exported from England, and for this description it would seen that sooner or later there must, spring up a demand. The price of Chili bars has stood throughout the week at \$50, to \$86.; for g.o.b., ordinary cash terms. To day's price is \$50, cash. There is some jenguity for four and six weeks' prompt, and a more cheerful tone at the close periods. Some orders have come in for 4 by 4 Indian sheets, and also for yellow metal. Wallarco orders have come in for 4 by 4 Indian sheets, and also for yellow metal. Wallarco orders have come in for 4 by 4 Indian sheets, and also for yellow metal. Wallarco orders have come in for 4 by 4 Indian sheets, and also for yellow metal. Wallarco orders have come in for 4 by 4 Indian sheets, a nged resuscitation of business.

The transactions reported during the week have been

69s; No. 3, 63s. 6d.; and No. 4 forge, 57s. 6d. There is sufficient demand for forge iron to maintain quotations; other descriptions are very quiet. The production of pig-iron during November was rather less than during the preceding month, but stocks at the end of the month of November show an increase of nearly 1300 tons, as against the return at the close of October. Considering the position which the iron trade has occupied for so long a period this return is not deemed to be unsatisfactory. The close of the year is always rather a dult time, and the rail trade continues to be as depressed as ever. Buyers are not satisfied that the lowest quotations have been attained, and they are consequently holding back, so far as possible, until the trade enters upon a new phase, when they hope to make more satisfactory arrangements than at present are possible: 125 furnaces are reported in blast, and 29 out of blast. There are also others in the course of construction. Railway bars are quoted 7t. 15s. for ordinary sections. Plates for shipbuilding 9t. 10s. to 9t. 12s. 6d.; merchant bars, 8t. 15s.; and puddled bars, 8t. 17s. 6d. Thus early in the season is relief being dispensed to the necessitious families of workmen out of employ in the neighbourhood of Darlington, and the call upon the liberality of the charitably disposed is likely to be heavy before a return to an active trade will render such aid unnecessary. It cannot but be a matter of sincere regret that had other measures been adopted than those which have been so persistently followed during the past year, such a condition of affairs might to a great extent have been obtaited.

The report from South Wales for the past week is but a reiteration of previous reports, which have for a long time past here to the description of previous reports, which have for a long time past here to the description of previous reports, which have for a long time past here to the description of previous reports.

sary. It cannot but be a matter of sincere regret that had other measures been adopted than those which have been so persistently followed during the past year, such a condition of affairs might to a great extent have been obviated. The report from South Wales for the past week is but a reiteration of previous reports, which have for a long time past been to the effect that dulness reigns supreme, without any immediate prospect of alleviation. The depression of this month is characterised as, if possible, greater than that of November. A certain amount of activity caused by shipping off orders to northern parts has now altogether ceased with the approach of the winter season, and as other orders fail to supply the place of those already executed, or in course of execution, it is believed that by the turn of the year makers' books will very generally present a blank page. The feeling of want of confidence between employers and employed, to which resence has been so frequently made in these pages, tends to add an element of disrust in the future, which is of very serious consequence, and which, instead of dying out with the old year, still appears prepared to assume proportions which may cause a yet further continuance of the period of inaction. The determination of the men in both coal and iron trades is freely expressed to the effect that they will not submit to any further reduction in wages, and the supposed intention of the masters to enforce a reduction as a matter of necessity appears to be no secret throughout the district. The market for Scotch pic-iron opened very quiet at the beginning of the week, and quotations, sellers at \$4s. 3d., buyers \$4s. were almost mominal. Up to Thursday no transactions of any importance were reported, but on that day warrants changed hands \$4s. 4½d. to \$4s. 7½d., and at the close there were buyers at \$4s. 6d., and sellers at \$4s. 9d. To-day's price is \$4s. 6d.; market closes tolerably steady.

Week ending Dec. 5, 1874.. Week ending Dec. 6, 1873.. Total decrease since Dec. 25, 1873 LEAD.—Good soft English pig rules at 24l., but 23l. 17s. 6d. is eported as having been accepted for a parcel of "Cookson's."
ZINC.—Business has been done in London rolled from 30l. 12s. 6d.

to 28l. 17s. 6d., the quantity thus disposed of being about 80 tons.

SPELTER.—C. G. H. has realised 24l. 5s., and W. H. 24l. 12s. 6d.
ex-warehouse, and ordinary Silesian 25l. 15s. ex ship London, and 231. 15s. ex-warehouse Hull.

QUICKSILVER.—The latest quotation for this metal is 251. per bottle.

TIN.—The market has been quiet throughout the week, and quotations are not very firmly sustained. Straits tin has ruled from 93t. to 92t., the latter being the closing quotation.

TIN-PLATES.—Considerable sales have been effected for coke plates

TIN-PLATES.—Considerable sales nave been enected for core plates for spring delivery for the American markets, and a rise of 2s. to 3s. per box has taken place. This is really a good sign if the American merchants see their way clear to buy for next year; there is no doubt it will extend to iron and other metals. It is very hopeful, and evidently the beginning of better times.

ful, and evidently the beginning of better times.

Messrs. James and Shakspeare—Copper: In furnace material, sales of Chili regulus to arrive have been made by private contract at 17s. per unit, but stuff on the spot is held above buyers' views, although parcels for distant arrival can still be bought at moderate rates. At the Swansea Ticketing on the 3th inst., 1432 tons of ore, averaging 18 11-16ths per cent., fetched an average precof 17s. 13/d., stuff of high produce realising 17s. 33/d. per unit. Bars show a fur ther decline of about 11. per ton since our last issue, the quantity which has changed during the week amounting to nearly 1400 tons, from 86t. down to 85t. cash, 86t. 10s. to 85t. S. for arrival or extended prompt. All the transactions reported ware for good ordinary brands, there being apparently no best marks offering for sale. The charters for the first half November have been announced as 2400 tons, all bars, of which 800 go direct to France. This makes a total of 5600 tons as chartered in four weeks, which doubtless arises from a large portion being engaged forward by saling vessels, as the direct steamers from Valparaiso to Liverpool are now reduced to two per month instead of four as in the early part of the year: owing to this we expect the statistical figures of the quantity given as chartered and afloat, to return somewhat nearer to the average of former years—about 10,000 to 12,000 tons, whereas in 1873 it fell to 7843 tons, and during the present year has stood at 6595 tons. Yesterday, at the close of 'Change, quotations seemed a trifle firmer, but there is as yet no disposition to purchase beyond the supply of current wants. Australian continues neglected, and quotations are, therefore, somewhat nominal. English descriptions are quiet, and asles of second-hand parcels reported at low figures: but smelters refuse to accept prices offered by buyers, and are apparently contented to wait until the demand permits them to realise on their over terms. Foreign sorts continue dull, and at the

inas declined about 2s. per cwt. In Holland the market is rather stronger, and holders ask 58½ ft. for Banca, and 55½ ft. for Billiton.

Messrs. Vivian, Younger, and Bond—Copper: At the Swansea Ticketing, on Tuesday last, 1432 tons ores, British and foreign, sold at an average of 17s. 14d, per unit for an average produce of 18½ per cent., Cape ores of 28½ per cent. realising 17s. 3½d. per unit, being a decline of about 6d. per unit on the sale of the 24th uttimo. At the close of our report a week ago the market had given way, under the outside influence above referred to, about 2l. 10s. per ton on Chili bars from the highest point, and at this decline considerable quantities changed hands at 85l. 10s. to 86l., with a steadler market, which, however, was only temporary, owing to the receipt of telegraphic advices from Valparaiso to the 17th ultimo that the charters for the first half of last mouth were equal to 2400 tons in fine copper, 800 tons being a direct shipment to Franos. The price there had advanced, but there would seem to be still a fair margin on the rates current here. The market has since become extremely quiet, and as the holidays and stocktaking approach, there is little prospect of any material improvement in the demand for raw material, in view of the unusual large deliveries to the trade during the last two months. At the close two cargoes of Chilian regulus are advised as sold to arrive at 17s. per unit. The demand for tough and best selected has rather also good request. —Tix has been very sluggish during the week, and with the exception of a "hand to mouth" business in Straits at 92s. 64. to 95s., on the spatic has been generally neglected. A few transactions for arrival have been reported at 92s. to 95s., November-December shipment. The business in Australian on the spot has been too restricted to form a market, small sales, however, have been mentioned at 91. to 92.: 15 tons are known to have been sold to arrive at 91s. 64.

Messrs, French and Smith—Copper is rather easier, owing prin-

Messrs. French and Smith—Copper is rather easier, owing principally to the charters from Chili for the first half of November being rather heavy 2000 tons.—Tin is steady, with a fair enquiry for consumption.—Tin-Planes in good demand.—Lean firm, and scarce.

Messrs. Rogers, Sons, and Co.—COPPER: The charters from the West Messrs. Rogers, Sons, and Co.—COPPER: The charters from the West Coast for the first fortnight of November were cabled on Monday last as 2400 tons of copper, 800 being for Frauce. This sample quantity coming from the top of former advices of 4300 tons for October, coupled with the continued dearness of money, has had a depressing effect upon the market. Bars, in consequence, have receded 30, per ton, and ores and regulus about 1s, two cargoes being reported yesday at 17s, for arrival. The quantity of raw copper offering from day to day is very limited. At the same time, consumers are very loth to stock themselves until the future of money is more decided, and second hand parcels of English copper are in consequence offered below makers' prices, and without finding buyers. The general feeling in the trade is that this metal will increase in value after the turn of the year, and that the existing depression is caused solely by the high rate of money.—Tix: There is apparently an increased demand, it is presumed, in anticipation of a better enquiry for plates, which would seem to have commenced already for America; values may thus rule slightly higher than at present.

Messrs. Pixley and Abell-Gold: The arrival of the undermen-Messrs. Pixley and Abell—GOLD: The arrival of the undermettioned amounts has been announced: -110,800. per Pomerania, from New York: 39,000. per Gandinavian, from Me York: 39,000. per Gandinavian, from Halifa total, 179,800. Of this sum only the first—10,800.—has come to hand, and, owit to the decline in the demand for export, a portion thereof—41,000.—was sent in the Bank, together with 180,000. in sovereigns, out of the late Australian arriv and there have been no withdrawals. The French exchange keeps tolerably fir and there is, therefore, no enquiry for gold to-day.—Silves: The amounts hand during the week have been very small—about 12,000. in all. The demand exceedingly quiet, and the price remains at 51½d, per onnee. The Peninsular a Oriental steamer leaving to day (Dec. 10) takes 37,500. to Bombay.

CHEMICALS AND MINERALS—(Messrs. J. Berger Spence and Co., Mark-lane, Dec. 9).—Soda: Cream caustic, 60 per cent., 13l. 15s.; white, 14l. 10s.; soda ash, 2½d.; soda osh, 2½d.; concentration of the co CHEMICALS AND MINERALS-(Messrs. J. Berger Spence and Co.

tite, 18s. to 22s. dd.; puddling, 24s. to 27s.; colitic, 8s. to 10s.

THE IRON TRADE—(Griffiths's Weekly Report).—Friday Evening Dec. 11: The market for Scotch pigs has been steady over the whole week, with only moderate variations. There were some deliveries last Monday of iron, which sightly affected the market. The closing price in Glasgow this day week was 8ss. 6d.; the market this afternoon (Friday) left off at 4ss. 6d., which gives a loss 8ss. 6d.; the market this internoon (Friday) left off at 4ss. 6d., which gives a loss 18ss. 6d. on the week of about 2s. We have no appreciable change to notice in our market this week in finished iron. The merchants continue to purchase to satisfy pressure of the works in Staffordshire. Yorkshire, and Shropshire to a moderate extent in the trade at this particular month of the year. All the Staffordshire has a rewell off for orders for sheets, and the demand continues to run on thin gauges. All the makers in Worcestershire and Staffordshire are full of orders for this class and the situal particular month of the Middlesborough district have lately, in two instances, put down slitting-nills, and their rods have been sent into this market, but the quality does not appear to have given satisfaction, and buyers are obliged to recur again to the old Black Country, which intensifies the demand at the slitting-nills here a perceptible impulse to this trade in Staffordshire bars, and the orders which have been sent down will, no doubt, keep the works run ning. We have few specifications here for boller-plates, and certainly in the best and Middlesborough have good reason to complain of the inactivity in this very important branch of the trade. The Middlesborough houses also complain of the woy ears past.

The meeting at the Birmingham Exchange yesterday was well attended. Mr. George Barker, the Chairman of the Ironmasters' Association, Mr. Fisher Smith, Captain Barrows, Mr. Henry Williams, Mr. Steven Thompson, Mr. Baldwin, of viviate meeting of the heads of the coal and iron tr THE IRON TRADE-(Griffiths's Weekly Report).-Friday Evening

tion to these famous works, and bring their tin-plates so much nearer to the noted consumers in Wolverhampton and Birmingham of this article. House coal at Cannock Chase and all other districts is in good demand. On the other hand, furnace coal is slow in Staffordshire and Durham. Coke is really unsaleable. In this state of things Mr. Macdonald is advising the Scotch miners to go in for an advance; and we were a little amused to learn yesterday that our old riends the colliers at Dudley had organised a deputation, and actually waited upon Lord Dudley's agent, respectfully asking for an advance of 6d, per day in wages. We know that numbers of most influential ironmasters and coalconers and cesirons not to reduce wages, and we hope that the state of the trade util sustain these laudable efforts of the coalmasters. All will depend on the condition of the iron trade during the next month. Any reduction in wages will now hurt the masters quite as much as the men.

The wire-rod trade is not quite so brisk as it was. This remark applies to Shropshire. The mills are tolerably active at Warrington, and Russell Brothers, of the Lydbrook Works, took some good orders for their rods, "Lydbrook," at Birmingham yesterday.

ham yesterday.

With regard to the tin-plate trade, the makers generally in Wales are steadily at work. E. P. and W. Baldwin, of Wilden, and John Knight and Co., are particularly busy both in charcoal and coke.

Freights to India have advanced 10s. per ton, which has for the moment checked the export trade, but as the Calcutta market has been somewhat full of iron lately this will, perhaps, create a healthy reaction.

The MINING SHARE MARKET has been moderately active this week for two or three mines prominent at this time, but general business has been dull, and the quotations, as usual, merely nominal. The mines mostly dealt in have been Tankerville, Rookhope Valley, Carth. Bornan Gravels, Wheal Grenville, Parys Mountain, Prince of South Roman Gravels, Wheal Grenville, Parys Mountain, Prince of Wales, Penstruthal, West Tolgus, Wheal Peevor, South Condurrow, West Seton, Van Consols, Bog, Old Treburgett (preference), West Maria and Evitege, and a few others.

West Seton. Van Consols, Bog, Old Treburgett (preference), West Maria and Fortescue, and a few others. The heavy tin mines continue flat, with scarcely anything doing. Dolcoath nominally, 47 to 49; Carn Brea, $52\frac{1}{2}$ to 53; Tincroft, 28 to 29; Cook's Kitchen, 8 to 9; East Lovell, 2 to 9. West Tolgus Copper, $72\frac{1}{2}$ to 75; there has been another breakage of a rod here, but not of any consequence. Wheal Grenville enquired for at $5\frac{1}{2}$ to $5\frac{3}{2}$. Court Grange, $\frac{5}{2}$ to $\frac{1}{3}$; the lode in the 16 fm. level still maintains its value of 12. per fathom. East Caradon, $\frac{1}{2}$ to $1\frac{1}{2}$. The mines in the eastern district have had a good deal of attention lately, through the improvements in Devon Great Consols.

of 122. per fathom. East Caradon, \$\frac{1}{2}\$ to \$1\frac{1}{2}\$.

The mines in the eastern district have had a good deal of attention lately, through the improvements in Devon Great Consols, Hingston Down, and Marke Valley; and at Gunnislake (Clitters) the lode is worth in its various points of operation 2984. per fathom; one winze is worth 1204. per fathom. Prince of Wales also in demand again, at 10s. to 15s.; Wheal Crebor, \$1\frac{1}{2}\$; the sampling here is over 160 tons, which, it is thought, will more than pay cost. Devon Great Consols, \$2\frac{1}{2}\$ to \$2\frac{3}{2}\$.

Tankerville, \$7\frac{1}{2}\$ to \$7\frac{3}{2}\$; the lode in the 152 west is reported worth 604. per fathom for lead; stopes, 454. The 140 west 704 per fathom; stopes, 1564. The 140 east, 204.; winze, 804. The total points in operation, including ends, stopes, winzes, &c., are valued in the aggregate at 6844. per fathom. The sampling on the 10th was 100 tons of lead ore. Roman Gravels shares 12\frac{1}{2}\$ to 13\frac{1}{2}\$. Bog shares became in considerable demand after the result of the meeting and rose from 2s. 6d. to 6s., 8s. South Roman Gravels have advanced to \$\frac{1}{3}\$, 1; the directors' report, issued preparatory to the general meeting, congratulates the shareholders upon the improving prospects of the mine, which in the agents' opinion must shortly result in a great success. The accounts which accompany the report show a balance of 17004. to end of May, which has since been expended in new machinery, &c., but the company have in reserve 2730 unissued shares, which it is proposed should be offered to the present holders pro rata at 14 each; 5s. per share on application, 5s. per share in nine months. East Van, \$\frac{1}{2}\$ to 1; Great Laxey, 10 to 11; Hingston Down, 1 to 1\$\frac{1}{2}\$; Ladywell, \$\frac{2}{3}\$ to 3. Marke Valley, 30s. to 32s. 6d.; one of two important points are coming off here. South Caradon have advanced to 130, 140, owing to the better prices in copper, Old Treburgett preference, \$\frac{1}{2}\$ to \$\frac{3}

two important points are coming off here. South Caradon have advanced to 130, 140, owing to the better prices in copper, Old Treburgett preference, \(\frac{1}{4}\) to \(\frac{1}{4}\).

Wheal Peevor have advanced to 6, 7; the engine-shaft is looking well, and worth 70l. per fathom; winze, 40l. per fathom; 48 end west, 15l. per fathom. Good progress is being made, and the mine is looking well. Parys Mountain, 9s. to 11s.; Pennerley, 1\(\frac{1}{2}\) to 1\(\frac{1}{2}\); Penstruthal, 13s. to 15s., ex div.; Providence Mines, 4\(\frac{1}{2}\) to 5; Glaisdale Whinstone, 20s. to 22s. 6d.; Cathedral, 15s. to 20s.; Rookhope Valley, 10s. to 15s.; South Carn Brea, 1\(\frac{1}{2}\) to 1\(\frac{1}{2}\); South Condurrow, 4\(\frac{1}{4}\) to 4\(\frac{1}{3}\); South Frances, 14 to 16. Great Wheal Vor, \(\frac{1}{6}\) to \(\frac{1}{4}\); the accounts to be presented at the quarterly meeting show a loss on the three months of 426l. 8s. 6d., and a balance in hand to Sept. 12 of 412l. 4s. 10d. The operations at the mine are now very much curtailed, and the monthly costs rather under 150l. St. Ives Consols, 1\(\frac{1}{4}\) to 2\(\frac{1}{2}\); West Basset, 7 to 7\(\frac{1}{2}\); West Chiverton, 1\(\frac{1}{2}\) to 2\(\frac{1}{2}\); West Basset, 7 to 7\(\frac{1}{2}\); West Chiverton, 1\(\frac{1}{2}\) to 2\(\frac{1}{2}\); West Trances, 9 to 10; West Seton, 23 to 25; West Tankerville, 10s. to 12s. 6d.

Wheal Basset, 20 to 22\(\frac{1}{2}\); Wheal Kitty (St. Agnes), 4\(\frac{1}{2}\) to 5; Wheal Uny, 3\(\frac{1}{2}\) to 3\(\frac{3}{2}\). New Consols have been enquired for during the week from influential quarters at 2 to 3. South Crofty, 12 to 14. At Wheal Unity Consols, which was wound up by the Stannaries Court a few years ago, a return has been made to the shareholders of about 3s. per share.

Court a rew years ago, a return has been make to be a both of about 3s, per share.

Birdseye Creek, $2\frac{1}{2}$ to $2\frac{3}{3}$; Cedar Creek, $1\frac{1}{2}$ to $1\frac{3}{2}$; Emma, $\frac{1}{4}$ to $1\frac{1}{4}$; Flagstaff, $1\frac{3}{4}$ to 2; Malpaso, $\frac{1}{4}$ to 1; Malpabar, $\frac{1}{4}$ to $\frac{3}{4}$; Panulcillo, $\frac{1}{4}$ to $1\frac{1}{4}$; Richmond, $6\frac{1}{4}$ to $6\frac{1}{2}$; South Aurora, $\frac{1}{4}$ to $\frac{1}{8}$; Sweetland Creek, $2\frac{3}{4}$ to 3; Tecoma, 1 to $1\frac{1}{4}$; Utah, 5s. to 7s. 6d.; Eberhardt and Aurora, $4\frac{3}{4}$ to 5.

The Market for Mine Shares on the Stock Exchange during the week has been comparatively featureless. A fair amount of legitimate business, however, continues to be transacted, especially conmate business, however, continues to be transacted, especially considering the period of the year; and the firm tone maintained, supported by the improving aspect of the Metal Market, points to a large accession of business and advancing values at the commencement of the new year. The Board of Trade returns and other statistical evidence sufficiently attest a salutary expansion of trade, and this is certain to receive a powerful stimulus by the easier and more certain money market now indicated by the strengthening position of the Bank, the proportion of reserve to liabilities having increased during the week from 38 to 44 per cent. Other changes have also taken place, as shown by the return just issued, leading to the conclusion that if money does not become immediately cheaper at least the worst of its stringency, with its restrictive influences, has at length passed away. This opinion receives additional confirmation by the discontinuance of the continental drain of bullion, and the advance in the Paris Exchange.

American Mines continue dull, with drooping prices. Shares in the different gold-washing companies continue in fair request, and

the different gold-washing companies continue in fair request, and at best quotations. The news during the week confirms the fact that washing operations have been commenced. The water season, therefore, has set in unusually early, and this should have an effect

therefore, has set in unusually early, and this should have a continuous the returns for the coming year.

Richmond Consolidated, 6 to 6½, ex div. Cablegram received—
"Weeks run \$51,000, Richmond ore only." The total make for this season amounts to \$1,275,000. For the past five weeks the weekly average has been \$49,400, the best result yet attained with the company's own ore. The mere figures do not, however, convey the full value of the improvement in results, which are due not only to the creater richness of the ore, but also to the increased returns from greater richness of the ore, but also to the increased returns from the ore smelted. For several months past the waste in smelting the ore smelted. For several months past the waste in smelting has been reduced from 20 per cent. down to 12 per cent., thus giving an addition of that 8 new cent. has been reduced from 20 per cent. down to 12 per cent, thus giving an addition of that 8 per cent. to the mining profit. Any improvement in smelting adds greatly to the present and future value of the mine by the power thus obtained of utilising to a greater extent than heretofore the poorer ores that fringe and accompany the smaller bulk of the richer bodies, and thus 8 per cent. saved in smelting is equivalent to a large addition to the reserves of the mine. From the above causes it appears that the profits latterly are exceptionally high, "sufficient," as the manager writes, "to 84 tisfy the most exacting shareholders." We learn that the profits for November are estimated at 15,000%. The mine is yielding such abundance of ore that the present furnaces are not adequate to smelt for November are estimated at 15,000%. The mine is yielding such abundance of ore that the present furnaces are not adequate to smelt it fast enough. The fall of snow a fortnight or three weeks since greatly hindered the traffic at the time, a customary thing at that period of the year, but a few days' frost generally comes to harden the roads, and they are then in a better state than usual for heavy teams. Later on in the season, towards February, the real winter

fall of snow usually occurs, and then the ordinary roads are impassable for some weeks. With the customary hard frost interval a great deal of teaming can be done in the bringing in of fuel and taking back bullion. As the company had a large stock of fuel accumulated ere the snowfall, and a large amount of coke purchased, while abundance of ore was ready for transit to the works, it may be expected that the smelting will be continued longer, and with greater advantage than at any similar former period. The Burcha Sentinel of Nov. 19 states that the rails had been laid five miles south of Lodi, the station at the end of the first 20 miles. The line being now ready to receive the rails up to the point where it it is intended to stop this winter it may be hoped that by Christmas 40 miles of the new railway will be available for traffic, and thus shortly become an important element in diminishing the fuel and freight charges. The second set of refining apparatus was landed at New York Nov. 27.

It has been stated that the refining works will effect a direct saving on the bullion treated of \$20 a ton; the indirect effect will be that of rendering a comparatively small floating capital sufficient, owing to the fact that the produce can be marketed in three weeks instead of three months. As the accounts to the end of August show a balance of 5000l., after payment of all liabilities, leaving the company in possession of all its original and acquired mines, extensive new plant and construction works, at the cost of its subscribed capital, to which balance must now be added the profits realised in cash, or bullion, since the end of the financial year, it must be evident that a considerable surplus, after payment of the present dividend, will shortly be available towards that accumulation of floating capital out of profits which the directors recommended, and the shareholders sanctioned. The dividend of 5s, which is payable this day makes a total paid to the shareholders of 2l. 1s. 6d. per 5l. share; if to this be added t chase new properties and pant, it will be loade that the limit already made a net earning of more than half its cost. The extensive proved reserves, taken in connection with the important fact of the lode being struck several hundred feet ahead of the point to which it has been traced down by the most forward drifts, the intervening ground being, obviously, an addition to the reserves, point to a long life for the mine. The high increase in value of the ores at the more recent discoveries on the lode is also full of promise for

at the more recent discoveries on the lode is also full of promise for an increased ratio of profits to gross returns.

The Richmond hoisting-shaft is now being sunk 100 ft. lower with the object of running a drift to again strike the forward portion of the lode, the direction of which is known. This work will occupy some weeks, but when effected will improve the ventilation, facilitate the extraction of ore, and afford fresh demonstration of the capabilities of the mine. We are informed that final arrangements have been made with Mr. Reuben Rickard to go out to Eurska to take the position of manager-in-chief of the company's Eureka to take the position of manager-in-chief of the company's mines and works. This gentleman is the son of a well-known Cornish mine engineer, and has been trained from youth in various Cornish mine engineer, and has been trained from youth in various branches of mining, smelting and refining. For some time past he has been the manager of the Pontgiband works, where the Rozan process of refining has been successfully carried on. He is thus peculiarly qualified by his past experience to superintend the Richmond mining and smelting operations, and to conduct successfully the new refining works from which such great results are anticipated. The two chief departments—mining and smelting—have always been under the charge of experienced practical men. Capt, Rossiter has for more than two years had the conduct of the mining operations; Mr. Stringer came from the Germanea Works to superintend the smelting at the Richmond, and the result is sufficient testimony to his skill. Mr. Rickard will, therefore, find able coadjutors to aid him in the task of proving what this great mine is capable of producing. We learn that information has reached London this morning that the roads at Eureka are now in excellent condition; this will ensure supplies of fuel and allow of bullion being forwarded. being forwarded.

agstaff shares have ruled lower, and close $1\frac{3}{4}$ to 2; the following

Flagstaff shares have ruled lower, and close 1½ to 2; the following official communication has been received:—
"Sir,—I am directed to inform you that the accounts of the Flagstaff Silver Mining Company of Utah (Limited), for the quarter ending Sept. 36, 1874, have been received at this office, and that they show a profit of \$16,700. Mr. Patrick states that this disappointing result is owing partly to the comparatively low grade of the ore worked during the last six months, and partly to a large amount of the products having gone back into developments and improvements of the mine. Mr. Patrick further states that the result shown by the quarterly accounts rendered may, probably, be modified by the more complete return which he will make after stock-taking at the end of the year, when he will forward a full report of the exact workings of the mine during the past year, showing the developments made, the new machinery provided, and the improvements made in the furnaces, together with all facts connected with the management.—A. A. detect, Acting Secretary."

Tecoma, I to 1½; at the meeting yesterday (Friday) it was unanimously resolved to accept the offer (referred to in last week's Journal) to lease the mine. It was stated that corroborative evidence has been received as to the value and producing capabilities of the property. The details of the meeting appear in another column. Last Chance, ¾ to 1; the following official communication has been received:—

received:—
"Sir,—I am directed to inform you that a letter has been received by the board from Mr. Patrick, the manager of the mine in Utah, dated Nov. 11, as follows:—
'In reply to yours of Oct. 15 last, I have to say that we have not yet reached the vein with the tunnel, and have not taken out any ore for some time, for the reason that it can be taken out through the tunnel at much less cost, and we expect to reach the veln shortly. At the end of the year we will make a full inventory of all the materials on hand, as well as of all running outstanding indebtedness, and forward you a balance-sheet showing the actual working of the mine to that date.' The baard consider the above communication to be of a favourable obaracter, as they are of opinion when the vein is reached a good future awaits the shareholders. In answer to enquiring shareholders, I have to inform you that Mr. Davis has always acted up to his agreement in furnishing funds for home requirements.—J. Butler Willison, Secretary."

answer to enquiring shareholders, I have to inform you that Mr. Davis has always acted up to agreement in furnishing funds for home requirements.—J. Butler Willison, Secretary.*

Blue Tent, 5 to 5½; in another column is published some extracts from the annual report of the superintendent just issued to the shareholders. It is an exceedingly encouraging one, and gives promise of good future results. Washing has commenced here also. Cedar Creek, ½ to 1½; the superintendent telegraphs that the ditches are full, and that the washing season commences favourably. This will enable him to do some good work this year. Sweetland Creek, 3 to 3½; the superintendent writes, under date of Nov. 9, that it has commenced raining, and enabled him to start washing again. He is anticipating a plentiful supply of water, and is ready to utilise it. Tunnel still progressing as usual; the rock is rather softer, though, and there is only 200 ft. to run to complete it. Birdseye Creek, 2½ to 2½; the agent reports that he was washing steadily, and everything progressing in a satisfactory way.

Sierra Buttes, 2 to 2½; Plumas Eureka, 1½ to 1½. Independence are firmer at 1½ to 2½; the clean-up for November gave a profit of \$1100 after paying for the cost of sinking the shaft and other expenses on capital account, amounting to \$1000. The latest advices per mail report the shaft as sunk 24 ft. on the foot-wall. There is a large mass of quartz on the hanging-wall of the vein, which will be taken down and its value ascertained as soon as the shaft is down the required depth for another level. The stopes in the eastern shoot were slightly improved, and prospects most encouraging. St. John del Rey, 265 to 270; the crushing for the second section of November produced 1165 oits, per day, and the yield of gold averaged 94 oits, per ton. The month's profits is expected to be about 7300 to 7500£, equal to 90,000£ per annum, although consequent on the lode being as yet only partially opened out. The amount of tock being extracted is sufficient to employ the lode being as yet only partially opened out. The amount of rock being extracted is sufficient to employ little more than half the stamps.

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Cape Copper shares, after advancing to 31, 32 relapsed to 291, Cape Copper shares, after advancing to 31, 32 relapsed to 29½, 30½; it seems that some considerable speculative purchases had been made upon the anticipation that a larger amount would have been paid, or a bonus added; the result has been that shares were offered, causing the decline. The dividend (1*l*. per share) is payable on Dec. 2*l*. Russia Copper, 2½ to 2½; the details of the meeting are reported elsewhere. New Quebrada, 3 to 3½; Rio Tinto, New Coppels 21 to 22, considerable ettention has been directed.

New Consols, 24 to 23; considerable attention has been directed during the week to this property, and an active enquiry has sprung up for the shares. The approaching completion of the extensive new works for treating the ores for copper and silver, in addition to the tin and arsenic, has brought in influential buyers. Not only is the property of scaling rather for the property of society about to be worked on an extensive scale, but it is currently reported that the well-known copper lode of Devon Consols has been discovered ¹n it, so that this mine may soon take a prominent position in the

nit, so that this mine may soon take a prominent position in the market.

Van, 20 to 22; the cross-cut at the 90 has been driven 2 fathoms towards the lode, and a flier, or joint, from the lode has been met with containing good stones of lead; this is important as showing that the lode holds good. The agent reports a splendid course of ore in the end of the cross-cut going through the lode in the 60 west. Other points without much alteration. The company have sampled 500 tons lead ore this week. Van Consols, 2½ to 2½; the lode in the deepest working looks promising, the part already opened on is producing 2½ tons of lead per fathom; further improvements are looked forward to, as this level is at a corresponding depth to that at which the Van Mine commenced making its large returns of lead. Great West Van, 12s. 6d to 17s. 6d.; the cross-cut from Eliza's shaft, to intersect what they consider to be the main lead-producing lode of the district, is being pushed on with all speed. Captain Roach, being now fully employed at Van Consols, has resigned, and Capt. T. Hodge has been appointed in his stead. Pennerley, 1½ to 1½; there is no change reported at the mine. The late stormy weather has retarded dressing operations to some extent. Bog, ½ to ½; this mine has been inspected by Capt. Hodge for a shareholder, and reports most favourably. There is no doubt about the value of the mine, and shareholders should come forward and prevent their property from being sold by the liquidation. come forward and prevent their property from being sold by the

come forward and prevent their property from being soft by the liquidation.

Wheal Peevor, 6 to 6½; the following telegram was received from the manager yesterday (Friday) afternoon!—"Engine-shaft looking well, worth 70l. per fathom; winze, 40l.; the 48 fm. level west, 15l., good progress being made. Mine looking well." Penstruthal, 13s. to 15s., ex div.; a good mine is being steadily opened out. Crenver and Wheal Abraham, ½ to ½; the details of the meeting appear in arother column. another column.

and wheat Adraham, § to §; the debths of the lineeting appear in another column.

Subjoined are the closing quotations:—

Subjoined are the closing quotations:—

Sasheton, 1¼ to 1½; Bog, ½ to ½; Dolcouth, 4½ to 48; East Basset, 3 to 4; East Van, ¾ to 1; East Lovell, 7 to 9; Great Laxey, 10½ to 10½; Great Wheal Vor, ¾ to 1; East Lovell, 7 to 9; Great Laxey, 10½ to 10½; Great Wheal Vor, 4 to ½; Pennerley, 1½ to 1½; Providence, 5 to 5½; Roman Gravels, 12½ to 13½; South Frances, 14 to 16; South Roman Gravels, 12½ to 13½; Yan, 20 to 22; Van Consols, 2 to 2½; West Esgair Lie, 2 to 2½; West Frances, 8½ to 9½; West South, 8½ to %; West South, 8½ to %; West South, 23 to 26; West Tankerville, ½ to ½; West Tolgus, 73 to 75; Wheal Crebor, ½ to 1½; Wheal Grenville, 4¾ to 5; Wheal Ketty, 8t. Agness, 5 to 5½; Wheal Petro, 5 to 6½; Almada and Tirito, ½ to ½; Almillos, 1½ to 2; Blue Tent, 5 to 5½; Shirdseyo Creek, 2½ to 2½; Cape Copper, 29½ to 30½; Cedar Creek, 1½ to 1½; Chontales, ½ to ½; Cape Copper, 29½ to 30½; Cedar Creek, 1½ to 1½; Chontales, ½ to ½; Cape Copper, 29½ to 30½; Cedar Creek, 1½ to 1½; Chontales, ½ to ½; Cape Copper, 29½ to 30½; Cape Creek, 1½ to 1½; Chontales, ½ to ½; Cape Copper, 29½ to 30½; Cape Creek, 1½ to 1½; Chontales, ½ to ½; Cape Copper, 29½ to 30½; Cape Creek, 1½ to 1½; Chontales, ½ to ½; Cape Creek, 1½ to 1½; Chontales, ½ to ½; Cape Creek, 1½ to 1½; Chontales, ½ to ½; Cape Creek, 1½ to 1½; Chontales, ½ to ½; Cape Creek, 1½ to 1½; Chontales, ½ to 1½; C

Collieres and Iron Companies.—During the week business has been reported in Thorp's Gawber, Chapel House, Welsh Freehold, Bilson and Crump, Cardiff and Swansea, Newport Aberearn, Whitehaven Iron, and Clee Hill. West Cumberland Iron, 13 to 14; Staveley Coal A, 118 to 120; Silkstone Fall, 25s. to 35s.; Merry and Co., 3½ to 3½; Bilboa Iron, 4 to 45; Henry Briggs, 24 to 25; John Bagnall, 7 to 7½; Chas. Cammell, 6½ to 6 dis. By an improvement in the mode of turning out rails John Brown and Co. are enabled to dispense with 200 hammer and furnace men, and they are lowering wages 20 per cent. in the tyre department. There must be heavy reductions somewhere before the strange and rall as Works 24 fort shields of the largest size yet made are being prepared for one of the forts at Spithead. One was rolled the other day in the presence of several scientific gentleman till reduced from 28 tons to a little over 21½ tons. Brown, Bayley, and Dixon, 15½ to 16½; a notification has been made to the men of a proposed drop of 15 per cent. in wages, which appears likely to be agreed to Nanty-Glo and Blaina shares are flatter again, now quoted 43 to 47; but New Shartstone, now 18. paid, are 10s. better, closing 8½ to 9. Britannia from, 30 to 35; the dispute with the men has been settled. Chillington Iron, 5½ to 6½; Lee Durham Miners' Association, it is stated, are considering the durability of becoming the owners of a colliery, and have instructed their executive to take the necessary steps, with the view of raising suitable capital in 16. shares. It is to be hoped that they will be more fortunate than their brethren in South Yorkshire were with their colliery. Chapel House, 4 to 4½; Cardiff and Swansea, 4 to 4½; Thorp's Gawber, 14½ to 15; Clee Hill, 5s. to 7s. 6d.; Newport Abercarn, 3½ to 4½. Reland. Wilkes, and Co. (41, paid), ½ to 3½ prem.; the first dividend will shortly be declared. West Mostyn, 12 percent, preference (82, paid), 3½ to 3½; the half yearly dividend will be paid next month. Bilson and Co. (42, paid), ½ to 14 prem

At Swansea Ticketing, on Tuesday, 1432 tons of copper ore were sold, realising 22,932l. 9s. 6d. The particulars of the sale were—Average standard for 9 per cent. produce, 107l. 4s. 6d.; average produce, 18 11-16; average price per ton, 16l. 0s. 3d.; quantity of fine copper, 267 tons 12 cwts. The following are the particulars of the

Compared with the last sale, the decline has been in the standard 11.5s., and in the price per ton of ore about 4s. 8d. On Dec. 23 there will be offered for sale 1096 tons, from the Cape, Berehaven, Union, Bampfylde, Concordia, and Lisbon.

Bampfylde, Concordia, and Lisbon.

The DUBBY SYKE MINING COMPANY, with a capital of 10,000l., in shares of 1l. each, has been formed to purchase for 4000l. a triangular piece of mineral property on the south of Green Hurth Mine. The property contains the Green Hurth north and south vein, and others parallel thereto, and the Dubby Syke, an east and west vein. The mine was only slightly worked by a few men 40 years ago. Ample water-power exists on the ground, and a road, now partly formed, will give easy access to the railway stations at Alston, 12 miles; and Middleton, in Teesdale, 11 miles distant. Capt. W. Vipond reports that there is not the slightest doubt but Dubby Syke will prove a valuable mining sett. Situated near Green Hurth, possessing the same veins, the same ore-bearing sills, and the command of a far better water supply, it cannot fail to be a good venture for all who take an interest in it. He would most strongly recommend at the very beginning to commence sinking through the "Whin" in the lower part of the sett, on the Dubby Syke vein, and drive to cut the Green Hurth cross veins. Nothing short of absolute proof to the contrary will ever make them believe that these veins will not bear in depth, and he knows of no place where the Whin sile can be proved at less cost and more cleapily worked. Capt. Charles Kneebone reports that, taking into consideration the numerous lodes and junctions, the favourable position of the ground for working the productive sills by short drivages, the similarity of character both of veins and sills with the Green Hurth, and the facilities at hand for chapity and effectively opening up the mine, he has no hesitation in saying that with development they will open out a rich and lasting mine. The prospectus will be found in another column.

The PATENT SELF-LAUNCHING LIFE RAFT COMPANY are inviting who will the Green Hurth of the sund the supplement they will open out a rich and lasting mine.

The PATENT SELF-LAUNCHING LIFE RAFT COMPANY are inviting subscriptions for 4000 shares of 5l, each. The company is formed for the purpose of purchasing and working an invention, patented in England April 30, 1873, which adapts the present "captain's bridge" as a self-launching raft, fitted with water-tight seats, containing sails, masts, and oars, provisions, fresh water, stores, rockets, and is capable of saving mails and specie. The raft is furnished with compasses and rudder, and every necessary for sustaining life. The raft can be launched from either side of a ship. The ends of the launching ways (which are fitted with friction rollers) are lowered level with the deck, and the raft is carried clear of the ship by the impetus of its weight. In the event of the vessel foundering the raft disengages itself and floats in safety. The advantages which this raft possesses over every other means of saving life are apparent, and, in addition, have been verified by the opinions of naval authorities, engineers, and shipowners. The purchase money is 15,000. The prospectus states that it is always ready, and does not need any covering such as protects boats; it is self-launching, as no ropes or lashings have to be cut away; the launching cannot be affected by the freezing of the fr The PATENT SELF-LAUNCHING LIFE RAFT COMPANY are inviting not need any covering such as protects boats; it is self-launching, as no ropes or lashings have to be cut away; the launching cannot be affected by the freezing of the ropes used by boats; it cannot be swamped; it will live in any sea; it cannot be sunk, being built upon the cellular principle, and even should one or more of the cells be damaged the safety of the raft would not be impaired; one or more of these rafts can be fitted, which would save the lives of the crew and passengers of a vessel of the largest class, its containing powers being only limited by size; it can be constructed at less cost, and is of less weight, than a life-boat, size for size; and it utilises a necessary part of a ship, and can be fitted in front of poop or forecastle cabins, thus forming an extension of the decks of the cabins. The prospectus will be found in another column.

BREMER MINING COMPANY.—At the recent meeting of this company Mr. Zunz made a very objectionable statement with regard to the telegrams of prices of copper sent out periodically to the Australian colonies; and although the unjustifiable character of the charge was pointed out by the succeeding speaker at the meeting, it is possible that the correction (which was the more authoritative from being made by a character of the charge was pointed out by a character of the contractive from being made by a character of the character. from being made by a shareholder and promoter of the company who was certainly not likely to speak too favourably of copper buy may have received less attention than the original statement, Me LEWIS LAZARUS and Sons consider that the untruthfulness of the insinuation and its absurdity should be more prominently asserted. We much regret that so unfair a charge against them should have been published in the *Mining Journal*. The telegrams of prices of

copper in London are received by most of the copper mining com-panies in Australia from their representative in London, so that to prevent the knowledge of the true state of the market being as well known in Australia as in London would be practically impossible.

TECOMA SILVER MINING COMPANY.—At the meeting of this company yesterday the shareholders agreed to accept the offer of Mr. Gordon, of Salt Lake City, to lease the mine for two years, at a rental of \$100,000 (or 20,000%), payable quarterly, with the option of continuing the lease for a further three years at the increased rental of \$150,000 (30,000%) per annum. Mr. Gordon will give security for the payment of the rental quarterly, and also for the proper working of the mine. A detailed report of the proceedings at the meeting appear in another column of this day's Journal.

It is announced that the subscription lists for 50,000%. Perpetual Five per Cent. Debenture Stock balance of 110,000% secured upon the extension to the Midland Railway of the Somerset and Dorset Railway Company, will be closed on Tuesday next, the 15th inst., for London, and on Wednesday next, the 16th inst., for the country.

SWANSEA VALLEY STEAM COLLIERIES COMPANY.—The directors this company have just declared a second interim dividend at the rate of 10 per nnt. per annum. A previous one at rate of 15 per cent. was declared in June last. OLD TALARGOCH.—The nominal capital of this company is 10,000%, in shares of 10% each, but only 600 shares have been issued, 500 of these being paid up. The mine is doing well, and sold about 110 tons of ore on Thursday at Holywell ticketing.

ORES, &c.

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LEAD ORES.—LEAD-SILVER ORES.—SILVER-LEAD ORES. SILVER-LEAD.-HARD LEAD.-ANTIMONIAL LEAD. GOLD AND SILVER ORES.

ZINC AND LEAD ORES MIXED TOGETHER.

Particulars by letter. ARMAND FALLIZE, Ingénieur, à Liége (Belgium)

SALT LAKE CITY, UTAH TERRITORY, U.S. AMERICA.

WILLIAM BREDEMEYER,

MINING AND CONSULTING ENGINEER. U.S. MINERAL SURVEYOR.

Particular attention paid to Underground Surveys

OFFICE,-KIMBALL BLOCK, SALT LAKE CITY.

D. ERNEST MELLISS, A.M., Ph.D., MINING ENGINEER AND GEOLOGIST,

52, BROADWAY, NEW YORK, UNITED STATES,

EXAMINES and REPORTS upon MINERAL and other LANDS, MINES, ORE BEDS, &c., either in of out of the United States.

ORE BEDS, &c., either in or out of the United States.

Information furnished in regard to any of the American Mining Districts. Dr. Mellers has had special experience in the Silver and Gold Mines west of the Rocky Mountains, and in the Coal and Iron Region of the Southern States.

Refers by permission to—W. Butler Dungan, Esq. (Dungan, Sherman, and Co.), New York; L. P. Morton, Esq. (Morton, Bliss, and Co.), New York; Mark Brumagin, President Mariposa Mining Company; James B. Hodgskin, Esq., Prest U. S. Rolling Stock Company; Charles A. Jov, Ph.D., Prof. Chemistry, School of Mines, New York; Friedrich Wöhler, Ph.D., Prof. Chemistry, School of Mines, New York; Friedrich Wöhler, Ph.D., Prof. Chemistry, Univ. Gottingen; Malter Williams, Esq., Creswell Hall, Stafford, England; John J. Cisco, Esq., Globn J. Cisco and Son), New York; S. L. M. Barlow, Esq., New York; C. P. Huntington, Esq., Prest. Chespeake and Ohio Rellway; Charles F. Chandler, Ph.D., Prot. Rev. Der Reller, N. D., Prof. Geology School of Mines, New York; Rudolf Fittig, Ph.D., Prof. Chemistry Univ. Tübingen, Würtemberg.

CAPPER PASS AND SON, BRISTOL

ARE PURCHASERS OF ANTIMONIAL OF HARD LEAD, LEAD MATTE, LEAD SLAGS, LEAD ASHES, SULPHATE OF LEAD, COPPER SLAGS, COPPER REGULUS or MATTE, TIN ASHES, and TIN SCRUFF.

MIXED METALS and DROSS, containing LEAD, COPPER, TIN, or

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Apply by letter, address d Mr. Albert Smith, Post Office, Birmingham.

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WANTED, an APPOINTMENT by a MINING ENGINEER of great practical experience at Home and Abroad, both in METAL-LIFEROUS and COAL MINING. Could take a charge immediately. First-class references. lass references.
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WEST CHIVERTON MINE, PERRANZABULOE,

WEST CHIVERTON MINE, PERRANZABULOE,
NEAR TRURO, CORNWALL.

THE CREDITORS of the ADVENTURERS in the ABOVENAMED MINE are respectfully requested to SEND in their NAMES and ADDRESSES and the PARTICULARS of their DEBTS and CLAIMS up to the 31st day of October last, forthwith to Mr. Thorman Woodward, of Lemon street, Truro, Cornwall; also, a separate and distinct account of any and all debts contracted since the 31st day of October last, up to and inclusive of the 31st day of December, on or by the 6th day of January, 1875, also to be sent to Mr. THORMAN WOODWARD, as above.

(Signed)

(Signed)

GRANVILLE SHARP, Secretary.

THE PACIFIC MINING COMPANY (LIMITED).

THE LIQUIDATORS of the PACIFIC MINING COMPANY (LIMITED) are prepared to RECEIVE TENDERS for the UNION HILL GOLD MINE and MILL, GRASS VALLEY, NEVADA, U.S. Particulars can be obtained at the late offices of the company, 14A, Austinfriars; or of Messrs. Good, Daniels, and Co., Accountants, 7, Poultry, E.C.

THE CAPE COPPER MINING COMPANY
(LIMITED).
Notice is hereby given, that at a MEETING of the Directors of this company,
held to-day, it was resolved,—
"That a DIVIDEND of TWENTY SHILLINGS PER SHARE, free of income
tax, be now DECLARED, PAYABLE on the 24th day of December instant, and
that the Transfer-books be closed from the 17th to the 24th instant, both days inclusive."

By order of the Board,
C. LEAVER, Secretary.
6, Queen-street-place, Upper Thames street, London, E.C., Doc. 9, 1874.

THE ALMADA AND TIRITO CONSOLIDATED SILVER
MINING COMPANY (LIMITED).
Notice is hereby given, that the NINTH HALF-YEARLY GENERAL MEETING of the above company will be HELD at 47, Finsbury Circus, on MONDAY,
the 21st day of December, 1874, at Twelve o'clock precisely, for the purpose of
receiving reports from the directors and manager, and transacting the general
business of the company.
The Register of Transfers will be closed from the 7th to the 21st December inst.,
by order,
47, Finsbury Circus, 7th December, 1874.

H. G. DENNISS, Secretary.

ooth inclusive.
47, Finsbury Circus, 7th December, 1874.

ROYAL SCHOOL OF MINES CLUB,

THE SECOND ANNUAL DINNER will take place on MONDAY, December 21. Past and present students intending to dine are requested to apply for particulars to the Hon. Sec., Royal School of Mines Club, 28, Jermynstreet, S.W.

R. J. S. M E R R ASSAYER AND ANALYTICAL CHEMIST,

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Number during the past year being out of print, we recommend that the Journal should be filed on receipt; it then forms an accumulating useful work of reference.

be filed on receipt; it then forms an accumulating useful work of reference.

BIR,—Would any reader kindly inform me if the Cefn Coch Gold Mine, near Dolgelly, is in liquidation; and, if so, the name and address of the liquidator?—P.

New Consols Mining Company.—I have not seen any mention made in the Mining Journal of a discovery alleged to have taken place at this mine. Howis this? Why do not the managers keep the shareholders fully informed, as judging by the reports in the district most important results are anticipated, and this would appear to be receiving some confirmation by the demand that, I am told, has sprung up for the shares during the week.—Inquirement in the light of the receiving wheels upon ordinary rails, whilst the propelling wheels are toother working horizontally, and taking into ratchets formed in a third and central rail, which runs the whole length of the railway; but I recently heard it state by a lecturer that the toothed wheels worked on the side rails, and occupied the same position as the driving wheels of the railway; but I recently heard it state the same position as the driving wheels of the Rigi Railway and the mode of working it, the gradients, and the power used, as compared with a line on a dead level?—Stepper.

Halte.—"T. A. R." (Liverpool).—It was not Dana who gave this name to chloride of scaling but like the reader of the results and coloride.

level?—Stepney.

Hallte.—"T. A. R." (Liverpool).—It was not Dana who gave this name to chloride of sofium, but Glocker, in 1847. There may be as much to justify a mineralogist in calling the mineral in its natural state "halite" as there is to justify the chemist in designating the compound of sodium and chlorine "chloride of sodium" or "sodic chloride" when chemically pure. Accuracy is desirable as

MACHINE BANDS.—"H. J." (Liverpool).—You, no doubt, refer to the unstretchable machine bands, which consist of a fine iron canvass of the desired width embedded in vulcanised india rubber, the whole being covered with ordinary canvas. The delay caused by stoppages to take up and relace the belt is, of course, entrely avoided, and the bands are said to work with better grip, and to be quite free from slipping. The price is about 7d. per square foot, and considering that they are claimed to be unaffected by wet, heat, or frost, are perhaps more conomic than lower priced bands.

economic than lower priced bands.

Vegetable Arthricial Coal... The inventor of a process for manufacturing fuel from an admixture of 75 per cent. of olive kernels (after the oil has been extracted) with 25 per cent. of peat, lignite, and other materials found in abund ance in Italy and the South of France, is in want of 150,000% to 180,000% to televolope his invention. It appears that a small factory has been for some time past in full work in Italy, and that the cost price of the fuel is 30s. 60, per ton. The consumption to produce a given amount of heat is said to be somewhaless than coal which costs from 47s. 6d. to 55s. per ton in Italy, according to quality. The Italian Government would take 120,000 tons per annum of the new fuel.

coal which costs from 47a, 6d. to 55s, per ton in Italy, according to quality. The Italian Government would take 120,000 tons per annum of the new fuel.

Rock Drill, 3—13. T." (Strand).—There is really no objection to ordinary valves in rock-drills, whilst they have the great merit of being less liable to get out of order than the so-called valveless arrangements. The Excelsion' is theoretically the perfection of simplicity, and when all the parts are accurately in position is unsurpassed, but it is liable to wear out of truth as all valveless arrangements necessarily must do, so that it would probably be more desirable to adopt the Dubois François. The latter has done excellent work at the 8t. Gothard tunnel, and although it appears complicated it is found economic in working. The proper way of estimating the value of a rock-drill is to put it on a long sink or drive, and calculate the value of the work done at the end of 50 or 100 fms., and the time occupied in doing it. Suppose two drills bought at 125t. each, and 50th, paid for air compressing machinery; that the ground worked by hand is worth 8t. per fathom for driving, and that the 75th, shall be repaid in two years. This ground could be driven by a good rock drill at 3 ft. per day at the lowest average, so that 100 fms. would be completed in 200 days, or in eight months, omitting Sundays. Here 80th, has been earned, of which 250th, must be applied toward the repayment of the outlay for the drill and compressor, and, making a very liberal estimate, 100t, for coals, and 5t, per month for repairs—an absurdly large amount. This would leave 410th for labour, so that working three shifts a day and two miners and a labourer in a pare underground, and a man and labourer two shifts in day at the compressor, there could be paid to the six miners 5t, per month, to the two compressor men 4t, 10s. per month, and thus all would be satisfied to use the machine. The harder the ground the Bupplement. Subscribers would oblige us by demanding that the paper should be hande

the country booksener or their London agent.

Received,—"E. S. T." (Christiansand): Papers forwarded, and we shall be glad
to hear, as promised—"W."—"N. T."—"Shareholder" (Great Wheal Vor)—
"Country Shareholder" (Trewavas): Write to the Solicitors—"T. A. R.—"E. H."
"Shareholder" (Van Consols)—"C. G."." Next week—"G. J."—"W. H."—
"G. B. L."—"A. J. B.": In another column of this day's Journal—"E. B."

THE MINING JOURNAL

Bailway and Commercial Gazette.

LONDON, DECEMBER 12, 1874.

THE SANITARY STATE OF THE MINING DISTRICTS.

That the homes of the British workmen in many parts of the kingdom are most discreditable to us as a wealthy and prosperous nation we have of late been frequently informed, and whilst our grave and learned senators, and politicians, and philantbrophists generally have been squabbling as to which was the best system of national education they have paid little or no attention to the healthy physical development of the children to whose future mental training they have devoted so much time, energy and elegences. ing they have devoted so much time, energy, and eloquence. Health, in our opinion, is of even more consequence than education, but such has not been the view of our legislators or local magnates but such has not been the view of our legislators or local magnates if we are to look at the present condition of a great many districts, especially those in which our mining population are located. Not only in the Midland Counties, but in the Northern and North and South Wales are the houses of the miners in many instances little better than hovels, whilst residences of even a better class are so mixed up with pig-sties, open drains, and ash-pits, that they are in reality nothing more nor less thau fever-breeding hot-beds. The consequence is that the mortality, particularly amongt the young, was very heavy. That we are by no means over stating the facts relative to many localities we are in a position to prove by reports of a very recent date. At the recent Miners' Conference, held at Barnsley, attention was called to the sanitary state of a village on the borders of Derbyshire, called Sutton-in-Ashfield, where out of Barnsley, attention was called to the sanitary state of a village on the borders of Derbyshire, called Sutton-in-Ashfield, where out of one miners' lodge numbering 60 members 10 of the an had died from fever. Accordingly a deputation, with a medical gentleman, was appointed to visit the locality and report as to its sanitary state. The report was issued on Saturday last, and from it we find that the party first went to the village of Hucknall-Huthwaite, in Nottinghamshire, about two miles from Ashfield. At one of the houses at that village, where fever had been a recent visitor, they found water was very scarce, whilst close to the house was a well nearly dry, not two yards distant from the sump of the closet, the matter from which no doubt percolated into the well. In the village itself the main sewer turned into an open drain on the roadside about 40 yards from the houses. Samples of the water were then taken for analysation. At Sutton-in-Ashfield the sanitary arrangements were someation. At Sutton-in-Ashfield the sanitary arrangements were somewhat similar, and the water apparently by no means good. At Stanton Hill, where the houses appeared to be good and substantial, Stanton Hill, where the houses appeared to be good and substantial, it was found that the drains ran quite close to the wells from which the supply of water is obtained. The refuse from many of the houses ran into a field close by the roadside, one portion of it being quite a swamp, and, according to the report, "a finer picture being quite a swamp, and, according to the report, "a finer picture of a pestilence-breeder could not be imagined." On the various samples of water being analysed one was found to be contaminated with sewage; another had 3°8 per cent. of organic matter; whilst out of ten samples no less than eight were more or less contaminated. The state of the water was such as to be a fertile source of typhoid fayor and so likely traingrees the intercipies for the source of typhoid fayor and so likely traingrees the intercipies for the samples. typhoid fever, and so likely to increase the intensity of all zymotic diseases. Such is the fearful picture of one mining district, drawn at the instance of the Miners' National Association.

Still, the Association might have found a state of things quite as bad close to where they were sitting. At Ardsley, only two miles from Barnsley, and in which township the well-known Oaks Col-liery is situated, sanitary matters appear to be in a very bad state indeed. In one cellar the rural sanitary authorities found the sewage of a row of houses 2 in. deep, and running down the coal place. In another part of the village they found, in connection with a row of 24 or 25 houses, six piggeries, the sewage from both going into a sump only 3 yards distant from the back door of one of the cottages. The sump has been made from five to six years, and during all that time had never been opened. In another row of however these from a kitchen window. There were several other open sumps in the village, the smell from which, one gentleman stated, was so thoroughly offensive on a frosty day that it was two hours before he got rid of it. One gentleman said the state of Ardsley was truly terrible. He had travelled over a good det lof England, and on various parts of the Continent, as well as through the worst parts of Connaught, and he never saw anything so horrible as the present condition of Ardsley. Another gentleman—the Rev. H. B. Cooke, the Rector of the adjoining village of Darfield—said that in his parish there was a sump which had not been opened for 25 years. Some of the places recently visited by us in North Wales appeared to be little better than those described. At Bagillt the houses of the miners appear the very reverse of wholesome. But the want of proper sanitary arrangements, we can confidently affirm, are not confined to one mining county alone, but affect every one of them more or less, so that the mortality is much heavier in them than would be the case-were the drainage good and the water pure. We are from a kitchen window. There were several other open sumps in be the case were the drainage good and the water pure. We are glad, however, to find that the subject will be brought under the notice of Parliament during next session, and which, it is to be hoped, will lead to the introduction of a remedial measure for doing way with such a fearful state of things.

ENGLISH IRON IN THE UNITED STATES.

There can be no doubt that one material cause of the unmistake-able languor which now afflicts the British iron trade is the collapse. to a great extent, of the American demand for our rails. It is, then, a matter of considerable interest to examine official returns which have reached us this week in illustration of the imports of iron into the United States during the American fiscal year ending June 30, 1874. Of course, all the iron imported by the Americans is not of English manufacture, but the great bulk of it is; and, therefore, a decline in the imports is a matter of material interest to English iron-masters. The American returns confirm substantially the statistical information made available from time to time on the same subject by the English Program of Trade. Thus, in the year ending June 30. by the English Board of Trade. Thus, in the year ending June 30, 1874, the Americans only imported 103,000 tons of pig and cast-iron, while in the year ending June 30, 1873, they imported 240,000 tons. while in the year ending June 30, 1873, they imported 240,000 tons. Iron rails were imported during the year ending June 30, 1874, to the extent of 20,350 tons; in the year ending June 30, 1873, the corresponding imports were 240,000 tons. The falling off here indicated is comething tremendous. The imports of steel rails in the year ending June 30, 1874, were only 146,000 tons; in the 12 months ending June 30, 1873, they had been 160,000 tons. The imports of steel rails have thus been better maintained than those of iron rails, but still they exhibit downseion, probably English appliances for but still they exhibit depression; probably English appliances for the production of steel rails are still in advance of those existthe production of steel rails are still in advance of those existing in the United States, although even as regards steel rails a decline in the enquiry on American account has been noticed during the last month or two at some of the leading English industrial centres. The imports of plates into the United States declined to 6000 tons in the year ending June 30, 1874; in the year ending June 30, 1873, they had been 15,000 tons. While the imports of foreign iron into the United States have been thus declining, stocks of American iron have been increasing, and it is not a secret that these stocks have been mortgaged to some extent. The present difficult state of affairs as regards the consumption of foreign iron among the Americans seems to have farisen rather from a want of purchasers than from an increase in the native production. At the same time, even if this is the case, there can be little doubt that same time, even if this is the case, there can be little doubt that American native means of production have been greatly extended, and that even if affairs revive in the United States we shall have to struggle hard for rail orders upon the American markets with American ironmasters.

The panic which commenced in the financial and commercial cir-

cles of the United States in September, 1873, cannot be said to have yet disappeared—at any rate, so far as its consequences are con-cerned. The Northern Pacific Railroad collapse is, no doubt, comparatively forgotten, but the American railroad interest is still in a very weak, depressed condition. Credit is sick throughout the Southern States, and in the Western States the population displays southern States, and in the Western States the population displays a desire to deprive railroad capital of the remuneration to which it is legitimately entitled. Hence the work of railroad construction and maintenance proceeds with comparative languor in the wide territories of Brother Jonathan. Two years ago the Americans were almost railway mad, and only railroad building was the order of the day; now all the "premature" railroads have collapsed, and none but the very soundest and best railroad companies of the United States—such as the Pennsylvania, the Philadelphia and Reading, the Baltimore and Ohio, the Illinois Central, and the New York Central —find themselves enabled to raise additional capital, or to complete works which they may have undertaken. Moreover, general business is so dull and languid in the United States that we learn this week that even the Pennsylvania Railroad Company—probably the most powerful and prosperous corporation of the kind in the Great Republic—is reduced to a policy of retrenchment, and is diminishing its track gangs, and putting its employees generally upon a lower scale of remuneration. It is abundantly clear, from all the signs of the times, that 1875 will not be a very brisk year with the Americans. It may be a period of gradual recuperation, but the American railroad interest has been so sorely tried during the last fifteen months, and is still suffering to such an extent from current events, that, even putting aside American competition for a moment, we see little prospect of any immediate revival in the American -find themselves enabled to raise additional capital, or to complete we see little prospect of any immediate revival in the American

COAL AND IRON IN THE UNITED STATES.—The anthracite coal movement of Pennsylvania amounted in 45 weeks, ending Nov. 7 this year, to 16,358,541 tons, against 17,209,502 tons in the corresponding period of 1873, showing a decrease this year of 850,951 tons. The bituminous coal movement of Pennsylvania to Nov. 7 this year was 2,887,534 tons, against 2,876,675 tons in the corresponding period of 1873, showing an increase this year of 10,859 tons. The general result to Nov. 7 this year was thus a falling off of 838,102 tons in the coal movement of the State. Official American returns for the year ending June 30, 1874, show that the total imports of pig-iron into the United States in 1873-4 amounted to 103,000 tons, against 240,000 tons in 1872-3. The imports of iron rails in 1873-4 only amounted to 20,350 tons, against 240,000 tons in 1872-3. The imports of steel rails declined from 160,000 tons in 1872-3 to 146,000 tons in 1873-4. The imports of plates also fell off from 15,000 tons in 1872-3 to 6000 tons in 1873-4. COAL AND IRON IN THE UNITED STATES,-The anthracite coal

METALLIC ALLOYS,-German silver and other alloys have been used for forks, spoons, and other articles of table-ware; and the same have been plated with silver, and also with nickel. When this plat-ing is worn off, the metal, being of a different colour, appears in a very objectional manner; and, besides this, the metal is comparatively soft and liable to bend, and it is not adapted to use as a knife, because the edge will not remain sharp. Beside this, the silver of tively soft and flatie to belief, and it is not assigned that the silver of the because the edge will not remain sharp. Beside this, the silver of the plating is an entire loss after the plating is injured or worn off. To remove these objections Mr. Howell Wright, of Glastonbury, Conn., U.S., proposes an alloy of silver which is cheap, very strong, and elastic and hence especially adapted to use in the manufacture of forks spoons, knives, and other articles of table-ware, and thereby dispens spoons, knives, and other articles of table-ware, and thereby dispensing with nickel or silver plating; but the alloy is not limited in its use to these articles, but may be employed for any object to which it is available. The alloy consists of silver, 25 parts; nickel, 18; copper, 35; and zinc, 22=100 parts. The copper and silver are to be first intimately melted with a suitable flux, such as lime, chalk, or of these materials, and to these the nickel is added borax, or two The nickel will melt with ease when thus introduced. The zinc is added, and thoroughly mixed. This is preferably performed below a covering of silica, and a rod of plumbago can be used for stirring. This alloy is adapted to being rolled, forged, or otherwise worked, and it requires annealing from time to time. The resemblance to pure silver is very close, and the metal is capable of receiving a high polish, or of being hurnished. The cost of plating is availed and sump only 3 yards distant from the back door of one of the cottages.

The sump has been made from five to six years, and during all that time had never been opened. In another row of houses there was a sump from 4 to 5 feet in diameter full to the brim, and only 5 feet.

From the comparatively large quantity of nickel used in

the alloy the invention will be of great advantage to certain mines in this country which yield that metal in large quantities, but are now now at the present time lying idle.

GEOLOGICAL SOCIETY.—The friends of Mr. Alexander Heather-GEOLOGICAL SOCIETY.—The FIFENCES OF MITALEXANDER HEATHER-INGTON will be gratified to learn that he is about to be introduced as a Fellow of the Geological Society, Mr. Henry Woodward, F.R.S., and Mr. W. Jory Henwood, F.R.S., being amongst those who sign his application for admission. Mr. Heatherington has already done much to promote the development of the mineral resources of Nova Societic and it cannot be doubted that the fellowship now show the Scotia, and it cannot be doubted that the fellowship now about to Scotia, and it cannot be doubted that the fellowship how about to be conferred upon him will enable him to do still more by adding increased influence to his writings upon the wealth of the province, and thus be of as great commercial advantage to Nova Scotia as it will be an honour to himself.

METALLIFEROUS MINES OF CORNWALL AND DEVON.

Dr. Le Neve Foster's report on the mines of Cornwall and Devon, for the year ending last December, is an inieresting and valuable document. A summary of the returns for the year ended December, 1872, shows the following result:—

Employed underground.	Cornw	all. D	evons	hire.	Totals.
Boys of 12 to 13	1.190		127		1,317 13,673
Total underground Aboveground :	13,519	***************************************	1638	***************************************	15,157
Boys of 8 to 13	1,167	*** ********		************	1,334
Girls of 8 to 13			55	************	432
Males of 13 to 18			291	************	2,454
Females of 13 to 18		************	130	***********	1.508
Females above 18	2,193		119		2.319
Males above 18	5,733		771	***********	6,504
Total aboveground	13,009		1533		14 549
Total number employed	26,258	**********	3171	***************************************	29 699

The quantities of tin, copper, iron, &c., raised or sold in 1872, were-

Kind of Mineral.	Crude.		Refined		Fotals.	
ArsenicTons	3,049	************	2,222	***********	5.271	
Copper ore	40,278	**********	24.516	**********	64 794	
Trop ore	25 462		20 680		20.240	
Iron pyrites, including arsenical	1,114	************	1,193	************	2,307	
Lead ore	. 5,429		746	***********	6.175	
Potter's clay		***********	5,500		5.500	
Tin ore (black tin)	. 12,423		147	************	12,570	
Tin ore sold in stone	. 17,336	************	-	************	17,336	
list of fatal agaidants	show t	hat in ani	tooft	ha absone	a of J	

The list of fatal accidents show that, in spite of the absence of danger from fire-damp, the miners in the district have a more perilous occupation than that of many colliers. In the year 1873 there were no less than 59 fatal accidents, causing the loss of 60 lives—2 by falls of ground, 19 by falls in shafts, 18 "miscellaneous" underground accidents, and 15 aboveground. The total accidents for Great Britain and Ireland is 103, and deaths 104, so that Cornwall and Devon contribute more than half. As the returns of persons employed in 1873 have not yet been all received, an exact calculation of the number of persons employed per life lost cannot be made; but taking the 1872 returns as a standard, it appeared that about 500 persons were employed per life lost, giving a death rate of 2 per 1000; this death rate exceeds that of the colliers of Northumberland, Durham, Cumberland, Monrouth Glougestershire, Somersetshire, and Sactland. De Feeter Monmouth, Gloucestershire, Somersetshire, and Scotland. Dr. Foster thus adds this fact alone is sufficient to show that some legislation is necessary for the metal mines of the South-West of England.

REPORT FROM CORNWALL.

Dec. 10.—We may now consider it tolerably certain that there will be little of consequence stirring in mining matters until the New Year. There is always an indisposition to make a move—at any rate, an upward move—in the last weeks of December; and with the ordinary business of the country in a somewhat depressed condition, there are no circumstances which would lead to any exceptional extens so the feeling new is the two must wait and that

dition, there are no circumstances which would lead to any exceptional action, so the feeling now is that we must wait, and that waiting will be fairly rewarded.

By the lamented death of Mr. Davenport, St. Ives has been deprived of its representative. Ill health has prevented Mr. Davenport from devoting much time to his parliamentary duties, but he appeared to appreciate the special characteristics and need of the town. An attempt has been made to induce Mr. J. B. Bolitho, who was defeated by Mr. Davenport at the general election, to come forward, but it has failed. Politics apart, it is, we think, much to be regretted that a gentleman so capable of representing the peculiar interests of the county, in which he and his family are so largely interested, should not have found his business engagements permit of his entering into the contest. Mr. Magniac, the former member for the borough, who made an excellent representative of the mining interest, has likewise practically declined to come forward, and the field was thus left in the possession of Mr. C. Praed, of Travethow, interest, has likewise practically declined to come forward, and the field was thus left in the possession of Mr. C. Praed, of Trevethow, a gentleman of business experience, who represents an ancient Cornish family largely interested in the welfare of the borough, and who doubtless although he is little known, has a practical acquaintance with those peculiar local conditions and needs which one expects a Cornish member to represent. Probably there will be a contest—Sir Francis Lycett having been named as a Liberal candidate—if so, it is to be hoped that whoever is chosen will be a business man, and that of the right type.

that of the right type.

A most diabolical attempt at wholesale murder has been made at the West of England Fire-Brick, Bitumen, and Arsenic Works, near Calstock. Someone, who is at present unknown, emptied a pailful of white arsenic into a tank from which not only the bulk of the Calstock. Someone, who is at present unknown, emptied a pailful of white arsenic into a tank from which not only the bulk of the employed but the tenants of cottages adjoining the works were in the habit of taking their drinking water. The result was that when the hands stopped for breakfast a large number of them used this water to make tea, and that upwards of 60 were poisoned. They suffered agonies, but fortunately efficient medical aid was so quickly at hand that their lives were preserved. A reward has been offered for the discovery of the dastardly criminal, and it is hoped he may be discovered, especially as it is known that the arsenic must have been put into the water within a space of three or four hours, barely that time elapsing from the water being used with impunity to the serious results which we have described. The West of England Works are those with which the name of Dr, Emmensis so familiarly associated, and there is no blame whatever of any kind attaching to the management, as all manufactured arsenic is carefully stored.

We owe another debt to the fertile pen of Mr. J. H. Collins, F.G.S.—a treatise on the Principles of Metal Mining, included in the Elementary Science Series of Messrs. Collins, Sons, and Co., of London and Glasgow. It is a wonderfully full and exhaustive detailed outline of the art of mining, dealing with it in all its practical ramifications, and that in the very clearest way, with a profusion of illustrations. We can commend the work not only to young miners, but to all who want to know what mining really is—what the perpetual talk about shafts, and adits, and levels, and sumps, and winzes, heaves and deadwork, pumping and dressing, actually means. There are many—very many—who are largely interested in mining matters who do not know half as much about these things as they find they should do; and to these, no less than to the young mining student, we can commend this capital little treaties. Mr. Collins is careful

who do not know half as much about these things as they find they should do; and to these, no less than to the young mining student, we can commend this capital little treatise. Mr. Collins is careful to point out what from his practical acquaintance with mining matters he knows very well—that the art of mining must to a large extent be learnt at the mine, either underground or at the surface—but he enforces with equal strength the desirability of our miners being taught something of the sciences connected with the operations which they have to carry out. With regard to mining itself, he remarks that there are two principles universally applicable to legitimate mining operations. First, that they should not be unduly dangerous or injurious to the men engaged—a matter of which the Government has taken care; and next, that they should pay. In relation to which he says it behoves all honest men to set their faces against mining in the interest of stockjobbers, and to return to the old system of working a mine for the sake of the ore it may reasonably he supposed to contain.

Capt. Francis Oates, late of Bottaliack Mine, St. Just, has ob-

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onably be supposed to contain.

Capt. Francis Oates, late of Bottalack Mine, St. Just, has ob-

tained the appointment of Colonial Mining Engineer to the Diamond Fields, West South Africa. The appointment is worth about 600% per year with expenses paid, with 1000% if paying them himself.

TRADE OF THE TYNE AND WEAR.

Dec. 10.—The Coal Trade continues with little change, except for Dec. 10.—The Coal Trade continues with little change, except for gas and house coals, and for both descriptions there is a good demand at pretty good rates. Large shipments of these coals have been made at Tyne Dock, but many of the vessels are yet in port, having been detained by violent storms in the North Sea. At Blyth the trade has been much retarded from the same cause, and many of the works have been working short time in consequence. Best gas coals are sold freely at 13s, per ton, and some of the best house coals have realised 17s. per ton. There is no change in the price of steam coal. The coal and coke trades in Durham are extremely dull, and small and manufacturing coals are accumulating in large quantities. The demand for coke is very limited for the West Coast, and also for the Sheffield district, having fallen off considerably. Best coke is

The demand for coke is very limited for the West Coast, and also for the Sheffield district, having fallen off considerably. Best coke is now quoted at 6s. per ton, delivered at works on Tees Side.

The Iron Trade continues extremely quiet. At Middlesborough, on Tuesday, there was a good attendance, but very little business done. Nominal quotations remain the same as last week, but they really are weaker. No. 1, 68s. to 69s.; No. 3, 63s.; No. 4 forge, 57s. 6d. net cash; but it must be observed that many of the merchants are selling iron at rates under these quotations. The rail trade continues bad, and there is great distress among the ironworkers. A question is engaging attention in the iron trade between makers and merchants as to the dates of payment for iron. The makers ask for bad, and there is great distress among the frolworkers. A question is engaging attention in the iron trade between makers and merchants as to the dates of payment for iron. The makers ask for payment against delivery, but the merchants stand out against such an alteration, as their credit is greatly shortened. The matter is still under consideration. The founders are pretty well engaged, and engineers and shipbuilders are also doing a pretty fair trade. The following is the return of the Cleveland Ironmasters' Association of the make of pig-iron:—Month ending Nov. 30, 1874, 171,159; month ending Nov. 30, 1873, 170,512; month ending Oct. 31, 1874, 171,471; increase upon November, 1873, 647; decrease upon October, 1874, 312 tons. Shipments (foreign) of pig-iron from Middlesborough: month ending Nov. 30, 20,782; corresponding month last year, 25,025; decrease, 4243 tons. Shipments (coastwise) of pig-iron from Middlesborough: month ending Nov. 30, 19,741; corresponding month last year, 17,927; increase, 1817 tons. Makers' stocks, Oct. 31, 1874, 50,293; Nov. 30, 1874, 60,582; increase upon October, 1284 tons. Abstract, decrease in make upon October, 312: increase in makers' stock upon October, 1284 tons.

NEW PUDLING-FURNACES AT DARLINGTON.—The depression in the rail trade, it appears, does not extend to the plate-mills, for it

New PUDDLING-FURNACES AT DARLINGTON.—The depression in the rail trade, it appears, does not extend to the plate-mills, for it is stated on good authority that at the works of the Skerne Company, at Darlington, preparations are being made for the erection of about a score of additional puddling-furnaces.

Northern Institute of Mining and Mechanical Engineers.—The meeting of members, on Saturday, was largely attended. Mr. R. S. Newall was in the chair, and a great number of new members were elected.

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A paper was read by Mr. G. A. Lebour, F.G.S., "On the Little Limestone and its accompanying Coal in South Northunberland."
In introducing the subject the writer remarked that hitherto their
coals had received little attention, owing to the occurrence of thicker coals had received little attention, owing to the occurrence of thicker beds near the coast, but as the thicker approach exhaustion more attion will be paid to those beds treated of in his paper, and these must eventually acquire a much greater commercial importance than hitherto. Many of those beds are of good quality, both in West Durham and Northumberland, and they will be sought after and worked, and the writer also remarked that many of them will be found thicker and of better quality than is generally supposed.

A paper was also read by Mr. Aitkin, giving a description of coke ovens erected at Almon't Ironworks, near Falkirk. This subject is intimately connected with the working of the thin seam alluded to in the former paper, as many of these seams make coke of fair

in the former paper, as many of these seams make coke of fair quality. At the Plashetts Collieries a seam is now worked upwards quality. At the Plashetts Collieries a seam is now worked appropriate of 4 ft in thickness, and coke of a very useful quality is made from this seam. One of the thin seams alluded to has also been opened lately at Henshaw, near Hattisworth, and a company having been actionally this seam extensive works are in course of being formed to work this seam, extensive works are in course of being opened out.

An elaborate paper was also read by Mr. Bewick, on the water An elaborate paper was also read by Mr. Dewick, on the water question, which has been much agitated on the Tyne lately. Mr. Bewick describes three lakes, situated 39 miles west of Newcastle, and if his views are correct an abun-lant supply of good water can be had from those lakes for the use of the Tyne population at a moderate cost—say, 150,000/.—to convey this water to the works of the present water company.

REPORT FROM SCOTLAND.

Dec. 9.—We have again to report a quiet market during the past week. Business was done in warrants from 85s. 6d. to 87s. for prompt cash, the latter price was paid on Friday last for settlement on that day. This week the market has been very inanimate, only one or two transactions having taken place at 84s. 3d. and 84s. 6d., closing at latter price this afternoon. Undernoted are quotations for makers' iron: makers' iron :-

G.m.b. at Glasgow (deliver	able alongside)	**********	888.	0d	818	.bd.
Gartsherrie ditto	ditto	********	95		85	
Coltness ditto	ditto	***********	100		84	
Summerlee ditto	ditto	*********		0		0
Carnbroe ditto	ditto	***********		0		0
Monkland ditto		*******		0		0
Clyde ditto				0		0
Govan, at Broomielaw	ditto	**********		0		0
Langloan, at Port Dundas	ditto			0		0
Calder ditto	ditto			0		0
Glengarnock, at Ardrossan	ditto	***********		0		0
Eglinton ditto	ditto		98	6		6
Dalmellington ditto	ditto	**********	87		80	
Dalmellington ditto Carron, at Grangemouth, se	elected ditto	**********	95		00	0
Shotts, at Leith	ditto	**********	07	******	84	0
Kinneil, at Boness	ditto	**********	90		78	
Bar iron	ditto	********	£10	0	10	0
Nail rods	*******************		10	0		
	SHIPMENTS.		10	v	-	
Week ending Dec. 5, 1874 Week ending Dec. 6, 1873			•••••	******* **	9,13	38
Total decrease since Dec. 25					1,98	2.4
Imports of Middlesborough pig For the week ending Dec. 5 For the week ending Dec. 6					2,68	50 30
Total increase for 1874					ac	00

Apart from speculative influences, there is little to stir the Pigmarket, ordinary business being quiet and limited, with makers posed to easier terms. Labour is also more steady and uniform in its ongoing, and with moderate quotations a fair business may be done in pig metal. The stock in store is increasing, and is now

The inertness of the Finished Iron trade has become permanent, and the little that was doing is becoming less with the close of the year. The prices are nominal, as specifications can be placed under list cost. The Glasgow Corporation Water Commissioners are intiting tenders for about 10,000 tons of water-pipes, ranging from 48 to 15 in. diameter. Ship iron is neglected for the nonce.

The shipments of coal from the Scotch ports show a very great increase over the closing week of last year, the figures being respectively 74,105 tons, against 38,738 tons.

Coals are very dull of sale, and orders are very scarce, both for manufacturing and domestic purposes: prices are consequently easy.

Coals are very dull of sale, and orders are very scarce, both for manufacturing and domestic purposes; prices are consequently easy, and, if anything, drooping. Mr. Macdonald, M.P., has been revisiting our mining districts, and advising his auditors to "demand" an advance on their wages of from 6d. to 1s. a-day. "Workmen had the right to fix the rate of their wages," said the hon. gentleman; and he eloquently fulminated against those sticklers at political economy who would subject the miners to pay the slightest heed to the law of supply and demand, or interfere with them demanding such rate of wages as they may deem themselves "entitled to." His aim seemed to be to make the miners believe that they were the

only workers in creation; but the miners only half-heartedly responded to his teachings, and the year may close with them still at their work.

their work.

Benhar and Niddrie Coal Companies—Amalgamation.—
A very stormy meeting of shareholders of the Benhar Coal Company (Limited) was held in Edinburgh on Saturiay, when a proposition of the directors that the company should amalgamate with the Niddrie Coal Company (Limited) was considered. The scheme was denounced in pretry round terms by several speakers, and an adjournment of the meeting was moved—this course being adopted to prevent the directors using the proxies they held. The motion for adjournment was carried, but on a poll being demanded a great uproar took place, which listed for a considerable time. Neither the majority of the shareholders nor the directors would give way; at last, as a compromise, the resolutions moved from the chair were suffered to pass on a committee being appointed to investigate into the affairs of the Niddrie Company, and report to a statutory meeting, which must be held within 28 days, to confirm what was agreed to on Saturday.—At a meeting of the Niddrie Company, held immediately afterwards, resolutions in favour of amalgamation were adopted, and a committee was appointed to report on the affairs of the Benhar Company in a similar manner.

BLOCHAIRN IRON COMPANY (Limited).—At a meeting of shareholders, held on Saturday, it was resolved to petition the Court of Session to appoint an efficial limitation to successed the directors in winding up the affairs of the special and efficial limitation to successed the directors in winding up the affairs of the special and efficial limitation to successed the directors in winding up the affairs of the special and efficient in which the successed the directors in winding up the affairs of the succession and the directors in winding up the affairs of the succession and the directors in winding up the affairs of the succession and the directors in winding up the affairs of the succession and the directors in winding up the affairs of the succession and the directors in winding up the affairs of the succession and the succession and

Company in a similar manner.

BLOCHAIRN IRON COMPANY (Limited).—At a meeting of shareholders, held on Saturday, it was resolved to petition the Court of Session to appoint an official liquidator to supersede the directors in winding up the affairs of the company. Since the foregoing meeting was held Mr. Robert Gillan, as the "representative of creditors to the extent of many thousands of pounds sterling, objects emphatically" to the course proposed, "until the creditors are paid 29s. in 11. and 5 per cent. interest." Such being the case, Mr. Gillan warns the share holders "that unless they deposit money sufficient to pay for such st-ps, and also make good any damage which may arise, they will be stremously opposed "by the creditors, who have "already lain out of their money for many months, and have no interest in discovering whether the shareholders have been swindled or not."

DUMFRISS PEAT FUEL COMPANY.—The report to be laid before the shareholders at the first annual meeting states that the directors, in carrying out the labours of the company, had met peculiar difficulties, which, in the carlier part of the year, threatened to frustrate their efforts, but which have now proved the means of saving the company from serious loss. Instead of adopting machinery and shels this year they contented themselves with manufacturing peat in the ordinary way, with the view of manufacturing charecal. As the price of charocal had fallen considerably they found it would be as profitable to dispose of the peat as fuel. The works were begun on May 31 last, and from that till the first week in August 782 falls, or 391 tons, were cut and dried, which at 38. 64, per fall, or 7s. per ton, yields 1386, 17s., being 737. 1s. 24. profit on the cost of labour. There remains to the credit of the revenue account a surplus of 487, 12s.

A MINER IN LUCK.—William McLaughlin, a miner of this city, left last night for Scotland, his native country, with the sung little sum of \$20,000, reallised in a few months in mining stocks. Some of our m

THE SCOTCH MINING SHARE MARKET-WEEKLY REPORT AND LIST OF PRICES.

REPORT AND LIST OF PRICES.

During the past week the business has been on a most moderate scale, and no movements of very special importance have taken place. Coal and iron shares are unchanged. The meetings of the Benhar and Niddrie shareholders took place on Saturday, to consider the proposals of amalgamation, and will be found in my report of that day's transactions. These moetings had little effect on the shares, and they are now firm. In copper shares, Canadian Copper Pyrites have fallen to 2, and Cape Copper risen to 31; beyond these there is nothing to note, but the tone is firm. In the other departments business almost nil. A dividend of 6s, 4½d, per share, less income tax, is announced as payable on Young's Paraffin shares on the 24th inst. The following meetings are also announced:—Arniston,

ments business almost m. A dividend of 0s. 43d, per share, less income tax, is announced as payable on Young's Parafilin shares on the 24th inst. The following meetings are also announced:—Arniston, Dec. 11; Cairntable, Dec. 23; Drake Walls and South Roskear, both on Dec. 18. A detailed list of the several days' business follows:—On Thursday last the business done was small, and prices were generally lower. Benhar done at 14½, 14¾, and 14 7 l6ths, closing 14½ to 14¾. Bolkov Vaughan A shares done at 55½. Elbūw shares lower, at 22 to 22½. Emma shares flat, done at 1, closing 15x. to 19s. Glasgow Caradon shares good, done at 32x, 9.1, closing 33x. to 34x. Marbellt shares done at 54%, closing 5½ to 57 l4ths. Merry and Caninghame shares done at 73x., 72x. 61., and 72x., closing 72x. to 72x. 6d.; the all-paid shares also changed hands at 196x. Monkland ordinary shares, 89x. to 90x; guarante-d preferences good, at 3¾ to 8½. Niddrie shares done at 20½, 20½, and 20½, closing 26½ to 26½; new shares, 18½ to 18¾. On Friday again the business was small, and prices lower. The principal feature was the decline in Benhar and Niddrie shares, on a rumour that the directors have been buying both compunes shares to carry the Amalg mutton; and if this is the case the official quotation of the shares would at once be discontinued, but this is considered very improbable. Benhar done at 14 9 l6ths, closing 14½ to 14½; Bolkow Vaughan A done at 55½; Elbbws, 22 to 22½; Elomin firmer, done at 20x., closing 21x; Glasgow/Caradon done at 33x, 61, and 33x, closing 33x, to 33x, 64.; Marbella 5½ to 54½; Merry and Cuninghame done a 72x, 64, and 72x, closing 71x, 60 no at 50 s., to 54; Merry and Cuninghame done a 72x, 64, and 72x, closing 71x, 60 no at 55½ and 61x, closing 61x, to 65x, 10 no at 61x, closing 61x, to 65x, 10 no at 65x, and 61x, closing 61x, to 6xx, 10 no at 6xx, closing 71x, 60 no at 55x, and 64x, one at 55x, 61x, 61x, 65x, 61x, 60 no at 55x, 61x, 61x, 65x, 61x, 60 no at 55x, 61x, 61x, 65x, 61x, 60 no at 55x, 61x, 61x, 65x, 61x, 60

Panuleillo. % to 1½; Tharsis done at 29½ and 29½, closing at those prices; West Maria and Fortescue, 7.8, to 98.

On Saturday the business done was very small. Benhar, 1½ to 1½; Bolckow Yanghan A done at 55½; Canadian Copper Pyrites flat, done at 2½, closing 2 to 2½; Cape Copper lower, at 29½ to 30; Ebbws done at 22, closing 22 to 22½; Emma done at 298, and 198, closing 198, to 98, 61; Glasgow Caradon unchanged at 398; the next sale of ore by this company will be 25 tons on the 17th inst. The last sale, computed 240 tons, weighted off 215; the sale at this time last year was 240 tons, but the price per ton is now much higher. Gunnislake (Clitters) good at 1½ to 2; the last report from the mine is of such a favourable character that it is difficult to understand why the shares are not much higher. Huntington done at 57s., closing 50s. 6d. to 67s. 61.; Marbella done at 55 and 57 18ths, closing 59t to 5 7 18ths; Merry and Cuninghume done at 71s. 6d; Niddrie done at 65s. and 68s.; Scottish Australian better at 1½ to 1½; Tharsis done at 26 9 16ths, 26½, and 26½, closing 58½ to 26½; West Maria and Fortescue lower at 65s. to 8s.

drie shares show little alteration. Benhar shares done at 14 7-16ths, closing 14½ to 14½. Bolekow Vanghan A shares done at *5½ and *55½, closing 55 to 55½. Canadian Copper Pyrites shares done at 41s., closing 498. 6d. to 41s. 6d. Cape Copper shares firmer, at 30 to 30½. Ebbw shares done at 22, closing 21½ to 22½. Emma shares done at 20s., closing 18s. 6d. to 19s. 6d. Galegow Caradon shares done at 32s. 6d., closing 32s. 6d. to 33s. Huntington shares done at 57s. Islay Lead shares have improved to ½, ½. Marbella, 59½ to 5½. Niddrie shares done at 48s. and 65s., closing 64s. 6d. to 65s. 6d. Omea and Cleland shares lower, at 56s. to 52s.; it is not expected that this company will pay a dividend next half year, on account of large expenditure on a new brickwork, to save making a call. Panulcillo shares done at 11-16th. Tharsis shares done at 245½, 26 7 léths, 26t4, and 265½, closing 26½ to 26½. West Maria and Forescue shares unchanged, at 6s. to 8s.

On Tuesday the business done was very small, and prices generally lower. Benhar 14½ to 14 7-16ths. Calratable shares unchanged, at 16ss.; the only be sent to those who apply for it. Canadian Copper Pyrites shares flat, done at 2, closing 9ss. 6d. to 49s. 6d. Cape Copper shares firm, at 30½ to 30½. Colorado Terrible shares unchanged, at 35½ to 3½. Drake Walls, no business: the meeting is to be held on Dec. 18. Ebbw valle shares done at 28½ closing 21½ to 22½. Emma shares done at 19s. 6d., closing 19s. to 20s. Fife Coal shares done at 5½. Huntington shares flat, at 55s. to 67s. Marbella, 5½ to 5½. Merry and Cuninghame, 72s to 73s. Monkland guaranteed preference shares done at 8½, closing 8½ to 8½. Routh Roskear, 5 to 6; the meeting is announced for Dec. 18. Tharsis shares done at 22, closing 11½ to 12½. Emma done at 18s. 3d., closing about 18s.; 18ch and 18s.; 18ch

moun	ıt.	Amou	nt	COAL, IRON, STEEL.	Latest
shar		paid n		Name,	price.
£10					
10	* * *	* * *	***		614
100	**	10 fr			551/4
10	0.0		***	Bolekow, Vaughan, and Co. (Limited)	
10	* 1	20		Cairn'able Gas Coal (Limited)	109s.
	1.0	00	***		81/8
33				Ebbw Vale Steel, Iron, and Coal (Limited)	22
10	* *		***	Fife Coal (Limited) Glasgow Port Washington Iron and Coal (Limited).	514
10			***	Glasgow Port Washington Iron and Coal (Limited).	78s.
10				Ditto All paid	634
10				Lochore and Capledrae (Limited)	734 534
10					534
10		. 3	1/3	Merry and Cuninghame (Limited)	73s.
10				Ditto All paid	196s.
10		10		Monkland Iron and Coal (Limited)	41/2
10		10		Ditta 7 con cont Commented Destaura	836
100		200			46
10		0	***	Niddrie Coal (Limited)	
10	**	4	***	Omor and Cleland Iron and Coal (Limited)	49s.
1	***		***	Scottish Australian Mining (Limited)	156
i	***	E		Ditto New	
	4.0	20	0.00		36
50	* 0 !		***	Shotts Iron	7836
10		. 4		Ditto New, issued at 2½ premium	6
				COPPER, LEAD, SULPHUR, TIN.	
10		7		Canadian Copper Pyrites (Limited)	2
10	***	9.0	***		634
10	**				
		7	* = =	Cape Copper (Limited)	30%
1		1	4.0 1	Cwm Bychan Silver-Lead (Limited)	7/4
1		. 1	***	Cwin Lery Lead (Limited)	414
_		- 5	111	Drake Walls	
2				Dunsley Wheal Phonix Tin (Limited)	36
1		1		Glasgow Caradon Copper Mining (Limited)	15%
1		154.		Ditto New	21s. 6d.
_		5	¥	Gunnislake (Clitters)	2
10		9		Huntington Copper and Sulphur (Limited)	57a.
1		1		Islay Lead (Limited)	36
25%.		234.		Kapunda Copper (Limited)	34
4		4		Panuleillo Copper Mining (Limited)	1
10		9		Rio Tinto (Limited)	814
10		10		Russian Copper Mining (Limited)	214
400	**	6		Russian Copper Mining (Limited) South Roskear	51/2
10	0 0 0	10		Tharsis Copper and Sulphur (Limited)	2854
10	* * 9	7		Ditto New	1834
10		804.	***	West Maria and Fortescue	36
1	- 20	1		Yorke Peninsula Mining (Limited)	
		-	- 0.0	Distantian Stime (Tantied)	36
1		bs.		Ditto 15 per cent. Guaranteed Preference	34
				GOLD, SILVER.	
5		5		Colorado Terrible Mining (Limited)	334
20		20		Emma Silver Mining (Limited)	
		10	***	Flagstaff Silver Mining (Limited)	2
10	100	9	100		
2			0.00	Javali Gold Mine (Limited)	. 34
5		5	0.00	Last Chance Silver Mining (Limited)	1
				OIL.	
10		7		Dalmeny Oil (Limited)	576
.5				Midlothian Mineral Oil (Limited)	3
10		9		Uphall Mineral Oil (Limited)	.5
10		10		West Calder Oil (Limited)	736
10			2	Young's Paraffin Light and Mineral Oil (Limited)	534
***		41,	4 111		-/3
				MISCELLANEOUS.	2024
10		10		Conglog Slate and Slab (Limited)	103/
10		10		Highland Peat Fuel (Limited)	10
50		25		London & Glasgow Engineering & Iron Shipbuilding	23
1		1		North Cornwall Kaolin (Limited)	134
20		7.5	2	Pernyian Nitrate (Limited)	5
10		10		Scottish Wagon Company (Limited)	12 1-16
10		1		Ditto New	22s.
		Last	day	for this account Dec. 12; settling day, Dec. 16,	

channeter that it is difficult to understand with the shares are not much higher, it is difficult to understand with the shares are not much higher, it is a strained to the state of the state and the state of the state of the state and the state of th

firm (Mr. Hawkins) retiring altogether from business upon an ample

The Iron Trade of North Staffordshire has not undergone much The Iron Trade of North Statiordshire has not undergone much change since our last notice. The foreign demand for finished iron is very restricted, and the few home orders in the market are much competed for. Crown bars are 9the 10st to 9the 15st, per ton, angles being in the usual proportion. The demand for plates is quiet, and prices are unsettled. The pig-iron branch is without change. Of the total number of 45 blast-furnaces erected 30 are in operation. Two new orders are in course of erection by the Chasterton Lyon Company and ones are in course of erection by the Chesterton Iron Company, and will be ready for blast next June. Coal is, on the whole, in steadier

request.

The Sneyd Collieries, in North Staffordshire, worked for many years by Messrs. C. and J. May, are about being converted into a joint-stock concern. The mineral wealth of the estate is very considerable, and under judicious management the concern ough yield in its new form a handsome profit on the invested capital.

yield in its new form a handsome profit on the invested capital.

To-day's quotations on the Birmingham Stock Exchange include the following:—Ivy House and Northwood Colliery (Limited), \$\frac{3}{4}\$ dis.; John Bagnall and Sons (Limited), \$7\frac{1}{2}\$; Pelsall Coal and Iron, \$2\frac{1}{2}\$ dis.; Staffordshire Wheel and Axle, \$2\frac{3}{8}\$ prem.; Cannock and Huntington Colliery (Limited), \$\frac{1}{4}\$ dis.; Chillington Iron, \$6\frac{1}{2}\$; Muntz's Metal (\$5\frac{1}{2}\$ paid), \$3\frac{3}{8}\$ prem.; Gloucester Wagon, \$15\frac{1}{2}\$; Birmingham Wagon, \$18\$; Oldbury Carriage, \$\frac{3}{8}\$.

SOUTH STAFFORDSHIRE AND EAST WORCESTERSHIRE INSTITUTE OF MINING ENGINEERS.

INSTITUTE OF MINING ENGINEERS.

The monthly meeting of the members was held in the Geological Museum, Dudley, on Monday. Mr. John Field presided, and there were present, among others, Mr. John Hughes (vice-president), Mr. Fellows, Mr. Pearson, Mr. Cole, Mr. Roper, Mr. G. Spruce, Mr. T. Latham, Mr. Addenbrooke, Mr. Rogers, Mr. W. Blakemore, &c. After the reading of the minutes of the last meeting and the council meetings (the latter of which referred to the special meeting held to consider the subject of nominating three members to sit on the Board of Examiners), the President reported that he had, in accordance with the wishes of the Institute, sent up the three names selected to represent the mining engineers to the Home Secretary. —Mr. R. Williams, colliery owner and mining engineer, Wishaw, Scotland, was unanimously elected an ordinary member. —The Secretary (Mr. Henry Johnson, jun.) having read the rule as to scrutineers of the balloting lists, for the new officers for 1875, the President elected Mr. Peacock lists, for the new officers for 1875, the President elected Mr. Peacock and Mr. North, ex-presidents, for scrutineers.——The PRESIDENT then moved that Mr. Brettell and Mr. Hayward should be auditors. then moved that Mr. Brettell and Mr. Hayward should be auditors, and this was carried unanimously.——The annual meeting was fixed for Jan. 18, 1875.——The Secretary read a letter from Mr. H. M. Morrison, in which that gentleman stated that he could not read his taper on "Compressed Air as a Motive Power for Machines used in Mining," because he was in Belgium, where he could improve his knowledge on the subject.——The President asked for papers for the annual meeting, and the Secretary said he should be glad of any paper or object of interest.——The Secretary reported that the "Transactions of the Society" were nearly ready.

NORTH STAFFORDSHIRE MINING INSTITUTE.

The members met at Stoke-on-Trent on Monday, when Mr. C. J. Homer, president, was in the chair. At the last meeting Mr. Clapp, of Nant-y-Glo, cxhibited a coal-cutting machine, when the experiments made were entirely unsuccessful, and on the following day a committee of the institute proceeded to Stoke to witness further trials with the same machine. Messrs. Lucas, Woodworth, and Michaelmann and Committee of the coalest and committee of the institute proceeded to Stoke to witness further trials with the same machine. Micheson now made a verbal report as to the experiments, which in substance was as follows:—"The machine of Mr. Clapp was an excellent drill, but they questioned whether it could ever be made to answer for coal-cutting in roadways. It was too bulky, too complicated in construction, and could not be worked profitably." It was understood that this subject would be discussed at the next theeting. Mr. J. Neale, Stoke, exhibited a magneto-electro signal for use in mines, the construction and working of which he explained, adding that it could be made with an indicator in front to show the number of times the hell was rung. A short discussion show the number of times the bell was rung. A short discussion took place in reference to the papers previously read on the subject of pit signalling by Mr. T. M. Goddard, of Longton, and Mr. Dibbin, of Stoke; and it was predicted that the electric signals would everywhere take the place of the old signals in collieries.

ERFORT FROM MONMOUTH AND SOUTH WALES.

Dec. 10.—So far as demand and supply are concerned there is no change to record in the general state of things since last week, and change to record in the general state of things since last week, and with the end of the year so close it cannot be expected that there will be any material alteration in business, whatever change may take place subsequently. Rails are reported as slightly in better request on foreign account, but few new orders have reached this district. Even if the demand were to improve there is far too much uncertainty hanging over the trade just now to admit of anything like extensive transactions being entered into. Until the new year epens, and it is seen in what relation capital and labour will stand to each other, comparatively little further business will be done this year, so far as the iron trade is concerned at least. There is little or year, so far as the iron trade is concerned at least. There is little or

no further change to be noticed in the tin-plate trade.

There has been a good deal of agitation in the district this week, the men having held a number of meetings to consider their situation in regard to the proposed reduction, and the general conclusion come so is that the employers will not be justified in making any further reduction in the wages rate. The men have, of course, made nuch use of the manifesto issued by Mr. Henry Crawshay, of the Cinderford Iron and Coal Works, which I referred to last week, while the masters have regarded it with displeasure. Mr. Crawshay, however, adheres to his assertion, and, referring to the matter this

however, adheres to his assertion, and, referring to the matter this week, says!—
"I think the Association of Masters in Bouth Wales not right in reading my letter in public, as it was only intended for the Forest of Dean colliers, miners, and ironworkers, where I know all the prices and trade well for rail and country. I am still of the same opinion, that the action of certain employers here (Cinderford) was not justifiable, in the face of winter, when they may have had Is. per ton alvanced as soon as the small stocks had been cleared off."

The colliers in this district do not say much, but though so many meetings have been held work has been attended to regularly. Mr. Thomas Halliday, and some other leaders of the Union, have been delivaring victoryus addresses to the man average won them the new

delivering vigorous addresses to the men, urging upon them the ne-cessity to be combined, and the Union seems to be getting into greater favour than ever. A meeting of masters and representa-tives of the men is to be held to morrow, when it is expected that the former will express their final determination whether they will carry out a reduction or not, and after that something may be known

as to what course the men will take. At any rate, the opening of the new year will be looked forward to with much anxiety.

Notwithstanding the agitation in regard to the wages question a large coal trade continues to be done. The demand on foreign account is kept up on the same large scale, and prices are firm. As an instance of the anyount of business the barred done its man beauty. an instance of the amount of business being done, it may be men-

an instance of the amount of business being done, it may be mentioned that the exports of coal from Cardiff alone last month reached a total of 279,512 tons, as compared with 189,654 tons in the corresponding month of last year, being an increase of 90,000 tons. The Nant-y-Glo and Blaina Ironworks Company meeting passed off in a tolerably satisfactory manner. Of course, there was no dividend, not even for the unfortunate preference holders, and, looking at the heavy encumbrances of the company in the shape of mortgages, it is tolerably clear that the prespects of the concern are mortgages, it is tolerably clear that the prospects of the concern are not very encouraging. The loss in the one year on the actual operations of the company was 4600%, and it will, therefore, not only be necessary to wipe out this sum but to earn a further 40,000l. per year net income before the preference shares are covered. After the preference come the ordinary shareholders, with a capital of 250,000l., and it may be safely calculated that unless some extraordinary pros-perity attends the company there is little hope of even a shilling and it may be safely calculated that unless some extraordinary pros-perity attends the company there is little hope of even a shilling dividend being paid to the ordinary shareholders. Proceedings have been commenced against Mr. Carlton, of Manchester, the ven-dor of the property, for the recovery of a large sum of money,

alleged to have been obtained by him as profit between Mr. Crawshay Bailey and the company.

The Taff Vale Wagon Company having reached the term for which it was originally started—21 years—is about to be dissolved. The company has been a very useful one as an adjunct to the railway company, for when it was established the now prosperous Taff Vale Railway Company was not in a position financially to purchase rolling stock for the traffic of the line, and to meet this the company was established. There will he some surplus funds to he dispany was established. pany was established. There will be some surplus funds to be disposed of, which, no doubt, when the liquidation expenses are paid will be divided among the shareholders.

REPORT FROM THE FOREST OF DEAN.

Dec. 9.—The all-absorbing topic in this district at present is the strike. It continues in all its intensity, and, as may easily be imagined, it sadly interferes with business, the pits concerned being idle, and between two and three thousand hands thrown out of employment. ployment. Strikes are objectionable in several respects, although ployment. Strikes are objectionable in several respects, although, under the present circumstances of the world, they seem inevitable. Sometimes large employers of labour push the point of profit too far by cutting down wages, which leads to resistance on the part of the employees, for as labour is the only thing they can bring to the market they have an undoubted right to make the best price for it the state of business and the labour market will admit of, but with-out considering the general circumstances of trade employers and the state of business and the labour market will admit of, but without considering the general circumstances of trade, employers and
employees are likely to go wrong. Capital is entitled to a fair return, and without a fair prospect of success, or what seems such,
capitalists, of course, would not invest, and, on the other hand, unless workmen can support themselves and families by the price received for labour, it can scarcely seem right that the labour should
be continued. It seems desirable that large employers and the labour public should come to terms upon the subject of labour by
adopting a minimum and maximum of wages, to be regulated by adopting a minimum and maximum of wages, to be regulated by the state of trade, but never to sink below the minimum nor rise higher than the maximum, or, in other words, the terms of such sliding scale should be strictly and honourably observed by employers and employed. Fluctuations in trade cannot possibly be prevented, but by adopting an equitable sliding scale for labour we think that the evils of strikes would be avoided if the terms of the agreement were once estificatorily averaged. An evil to be approximated to the contract of the strikes would be avoided if the terms of the agreement were once satisfactorily arranged. An evil to be apprehended by the strike in the Forest is lest the interruption of business in the coal trade should scare much of the present custom from this district by driving merchants and dealers to other markets, which, An evil to be appre in such an eventuality, would neccessitate working up a fresh business connection.

ness connection.

Another evil to be dreaded is that of driving many workmen to other fields of labour, and in that way diminish the available labour strength of the district. An insufficient supply of hands limits the production and returns of capital, so that capitalists by driving men away to other markets may defeat their own objects—i.e., the profitableness of business, because if they by their own acts and indiscretions reduce the available labour requisite for fully developing their businesses they thereby diminish their chances of success. The Forest strike is undoubtedly an evil, but it is an evil in this instance brought about by a small number of colliery proprietors, who brought about by a small number of colliery proprietors, who, although owning some of the largest works in the district, did a very unwise and inequitable thing by giving notice of reduction when trade was fair and prices good, and just, too, in the beginning of the busy coal season in the early part of winter. They persistently hold on hard, however, to their resolution of reducing their man large cent are free the centing-near of the strike, and eather and eather the continuous for the strike. men 10 per cent., or force the continuance of the strike; and as the men will not accept of the reduced wage of course the strike con-tinues. Many men are leaving to seek work elsewhere, and unless tinties. Many men are leaving to seek work elsewhere, and unless means are found to effect an understanding between the parties much mischief is likely to result to the neighbourhood by a long and stubborn strike. It already tells heavily on general trade, and, although all financial members of the Union will receive Union pay, that will be found insufficient to supply family demands, and non-unionists will find the contributions of the public, though numerous, insufficient to support them; suffering, therefore, more or less, stores both classes in the face. stares both class in the face.

stares both classes in the face.
The trade of the district, excepting the strike pits, is pretty good
prices to merchants being much the same as for some time past but what is called the home and country trade (consumption in and around the Forest) has gone up, block coal being now sold to the local public at 17s. and 18s. per ton. Most of the iron furnaces of the district are in blast, and that branch of business is much the same as for some weeks past. We wish we had less of strikes and more of business, but the strike being a stubborn fact it has forced itself to the front, but renewed trade activity, we hope, will shortly be the characteristic of the locality.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Dec. 10.—The Iron Trade of Derbyshire continues tolerably good as those to the north, have been working as usual, so that there has been no decline in the output of pig. The local production of ironstone has been gradually increasing for some time, so that the quantity imported from Northamptonshire is not so large as it has been. stone has oeen gradually increasing for some time, so that the quantity imported from Northamptonshire is not so large as it has been. In manufactured iron there has been no falling off, so that the foundries have been doing a very fair amount of business, as well as the mills and forges. The demand for house coal has rather improved of late, so that the collieries have been doing very well. From Clay Cross and Langley Mill, as well as from Tibshelf and other places, a large quantity of coal has been sent over the Midland to the metropolis during the week. The tonnage going on to the Great Eastern has also improved of late, as has that to Birmingham and the West. The Great Northern is now actively pushing forward its line from Nottingham to Derby, the first 20 miles of which it is expected will be open next summer. This will be the means of opening out a very extensive coal field, when a fierce contest for the mineral traffic to the South will inevitably ensue between that company and the Midland. The latter, however, is now engaged in giving increased facilities for the coal traffic to several collieries, and are asking for powers to construct branch lines to others. One line will intersect the rails of the Blackwell Coal Company, who are now engaged in sinking to the black shale, whilst another will pass through Tibshelf. The Derbyshire coal field gives every promise of being most extensively developed during the next two years, when there will be tween the coal traffic to a contract of the property of the means of the property of the plack shale, whilst another will pass through Tibshelf. The Derbyshire coal field gives every promise of being most extensively developed during the next every promise of being most extensively developed during the when there will be two direct lines two years, when there will be two direct lines to London and the southern markets.

That several of the Sheffield trades are unusually quiet for the

time of year, and that many workmen are on short time, has had to be repeated for several weeks past, and the fact that we are within a fortnight of Christmas has led to little, if any, improvement. ere has been some activity of late with respect to the production heavy armour-plates for coast defences, but in other descriptions of heavy work matters are much as they have been. Forgings are quiet, and the men at some of the large establishments have sub-mitted to a reduction of wages. There has been a decided falling off in respect! to Bessemer rails, but in the opinion of many a Scarcely any of the cutlery branches have improved, nor has there been any alteration with respect to the saw and tool branches. The works engaged in malleable castings have been doing very well, whilst general railway material has been in very moderate request. In South Yorkshire the coal trade has been very fair, but there are still complaints as to the want of wagons and power. The London still complaints as to the want of wagons and power. The London trade has been well maintained, both as regards Silkstones and Barnsley "softs," and prices have not changed at the pits, although merchants have of late made an advance to consumers. At Hoymerchants have of late made an advance to consumers. At Hoyland, where they are sinking from the Barnsley to the Silkstone coal, there was some signs of a strike on the part of the sinkers on Wednesday, but the matter was arranged. In two other parts of South Yorkshire they are going down to the Silkstone from the Barnsley coal, thus commencing a work that will open out hundreds of square miles of coal of excellent quality for house and gas purposes, which in the London market is esteemed second only to the best qualities of Wallsend. best qualities of Wallsend.

At the Barnsley Town Hall, Mr. Beevors, certificated manager of the Dodworth and Silkstone Colliery, was charged with a breach of the fifth general rule, in not appointing certain stations as required by the Act. The case was not pressed by Mr. Wardell, who said the colliery had been very well managed so far. Under the circumstances, the defendant was fined 20s. and costs.

CERTIFICATED MANAGERS OF COLLIERIES. THE EXAMINATIONS.

THE EXAMINATIONS.

The complaint has frequently been made since the Mines Regulation Act, 1872, came into operation that candidates for Certificates of Competency had no means of ascertaining the nature of the examinations they were required to pass, so that they were liable to apply their energies in the wrong direction, and thus be unable to obtain the desired certificate, although comparatively well educated, and possessing a fair amount of practical experience. Mr. RALPH MOORE, the Government Inspector for the Eastern Division of Scotland, has conferred a benefit upon the entire colliery community by giving, as an appendix to his report, a list of the subjects in which the candidates are examined, and a specimen set of examination papers. Candidates will understand that the same questions will giving, as an appendix to his report, a list of the subjects in which the candidates are examined, and a specimen set of examination papers. Candidates will understand that the same questions will not be asked at a future examination, and that they must, therefore, only consider them to show the character of the questions which they will have to answer. The subjects upon which candidates are examined for certificates are:

1.—The Coal Mines Regulation Act, 1872. General knowledge of.

2.—Ventilation. Theoretical and practical knowledge of.

3.—Modes of working coal, ironstone, and other minerals, having reference to the nature of the roofs and pavements.

4.—Sinking, fitting, and pumping, with theory of steam-engine.

5.—Winding, haulage, and strength of materials.

6.—Underground surveying and drawing.

7.—Arithmetic up to fractions, with calculations of areas and velocities.

The questions put at the Examination for Certificates of Competency under the Coal Mines Regulation Act, 1872, held at Edinburgh, Nov. 1 and 2, 1873, were:—

Nov. 1 and 2, 1873, were:-

Nov. 1 and 2, 1873, were:—

COAL MINES REGULATION ACT, 1872.

1.—When underground workings are approaching old wastes of which no plans have been kept, what special dangers are the workmen exposed to, and how would you provide against them?

2.—Btate shortly the general rules as to the use of gunpowder or other explosive materials in mines where inflammable gas has been noticed?

3.—What is the requirement of the Act as to the number of shafts in use at each mine, and state shortly the exceptions to it that may be allowed?

4.—In mines where there is inflammable gas, what special precautions are to be observed by the workmen and by those in charge of the mine?

5.—Give a short statement of the requirements of the Act regarding man-holes or places of refuge on underground roads?

6.—What limitations does the Act impose on the employment in mines of young persons between 12 and 16 years of age?

ENSTILATION.

persons between 12 and 16 years of age?

VENTILATION.

1.—Explain why artificial ventilation is more reliable than natural. Describe the different modes of producing artificial ventilation.

2.—For an extensive but shallow working, whether would you adopt a fan or a furnace, and give your reasons.

3.—How do you measure the velocity of an air current, and at what velocity would you have air travelling through the workings?

4.—Give your reasons for making air-courses as large as possible. Explain the advantage of splitting the air.

5.—Describe the barometer, and explain how it indicates the atmospheric pressure. What is a water-gauge, and of what use is it?

6.—Sketch what you consider a good furnace for a pit 60 fms. deep, with 100 men, giving its dimensions and relative position to the shaft.

7.—Under ordinary conditions as regards gas, what quantity of air would you have circulating in a pit with 100 men; and what is the least dimensions you would have the air-courses? Give observations regarding the necessity of having the air-courses? Give observations regarding the necessity of having the air-

MODES OF WORKING COAL.

—Explain the ordinary conditions for adopting the long wall and the stoop room working. and room working.

2.—In a seam having a dip and rise of one in six, and the direction of the plane
of the coal being to the full rise, sketch what you consider a good form of long
wall working for it, having regard to the ventilation, direction of the drawing-

wall working for it, naving regard to be considered as the product of a stoop and room working by which the greatest percentage of the seam can be got out.

4.—In a 4 ft. seam of coal 80 fms. deep, what size would you make the pillars, having regard to the ultimate extraction of the greatest quantity of coal combined with safety to the workmen?

5.—Give a rough section showing the different seams of coal in your district.

6.—Under ordinary conditions as regards roof and pavement, give your observations on the cost of working a 4 ft. seam of coal by stoop and room, and a 2 ft. seam by long wall, embracing the oncost necessary in each.

BINKING, FITTING, AND PUMPING.

Sinking, Firting, and Pumping.

1.—Sketch what you consider the best form of a shaft, 100 fms. deep, for an output of 300 tons a day, including ordinary provisions for pumps, and showing arrangements of slides and cages, with dimensions.

2.—Explain how you would prevent water met with near the surface from getting into the shaft.

ing into the shaft.

3.—How many gallons are there in 1200 tons of water, and describe the general arrangement and size of pipes for lifting that quantity daily from a pit 80 fms deep?

4.—Describe the class of engine best adapted for the above work, size of cylinder, stroke, and strokes per minute.

5.—Explain fully the advantage in a deep shaft of having a series of lifts instead of one long lift to the surface.

6.—Explain the action of a syphon, and its use and application in draining mines.

State the various methods you know of pumping water out of a dip working.

Describe the best kind of boiler and appliance: for the safe and economical

7.—State the various methods you know of pumping water out of a dip working.

8.—Describe the best kind of boiler and appliance: for the safe and conomical production of steam. Winding and appliance: for the safe and conomical production of steam. Winding and Haulage.

1.—Explain the forces acting on a self-acting inclined plane. Compare the friction of ordinary tubs on tram rails with the friction on a well made railway.

2.—Under the usual conditions of tram rails and tubs, what is the flattest gradient for a self-acting inclined plane 300 frms. long, to pass 100 tons in 8 hours? Sketch the best arrangement of it at the top.

3.—Explain the best mode of drawing coals along a level road, or one not dipping sufficiently to take away the rope.

4.—Explain why conical drums are necessary in deep shafts.

5.—Whether are chains, wire ropes, or hemp ropes preferable, and give your reasons. Giving the breaking strains of a rope, what is a safe working lode for it?

6.—State from your experience what is the cost of haulage underground per mile. How does it compare with the cost of a mineral railway aboveground? Give your observations on the different modes of haulage known to you, and how you think they might be improved.

7.—Accidents frequently happen on headings where the loaded tubs are taken down with snibbles, by the full tub running into the one before it or into an empty one coming up: now would you remedy this, and still retain the use of snibbles?

8.—In speaking of machinery, what is meant by horse-power?

8.URVEYING AND DRAWING.

1.—Sketch on paper as mear as you can the following bearings of a survey 82° N.E. 83 links, 87° N.W. 140 links, 52° S.W. 140 links, and 48° S.E. 85 links.

2.—Describe the compans, and explain the circumstances under which it is unreliable.

3.—Explain what is meant by the scale of half-an-inch to a chain.

reliable.

3.—Explain what is meant by the scale of half-an-inch to a chain.

4.—Describe the process of surveying underground.

5.—Describe how you would plot the same survey on paper, and name the instruments you would require to use.

6.—Why is it necessary to make deductions from the measurements to the rise and dip in steep workings, and how would you find the correct measurements?

7.—Suppose you were driving towards an old waste which is shown only on a plan 20 years old, explain the precautions to be taken as regards the meridian.

pian 20 years old, explain the precautions to be taken as regards the meridian.

1.—Add together 507 tons 13 cwts. 2 qrs. 12 lbs., 1670 tons 15 cwts. 1 qr. 8 lbs., 47 tons 14 cwts. 3 qrs. 14 lbs., and 498 tons 9 cwts. 2 qrs. 7 lbs.

2.—How much would be required to pay 75 men a fortnight's wages at the rate of 27s. 45/d. each per week?

3.—How many cubic feet of air will pass per minute through an air-course 5 ft. by 7 ft., when the current is travelling at the rate of 20 yards in 15 seconds?

4.—What weight of material will have to be raised in sinking a shaft 15 ft. by 5/t. and 40 fms. deep, supposing it averages 130 lbs. per cubic foot?

5.—How many gallons of water will be pumped in an hour by an eagine making eight strokes of 7 ft. each per minute, the diameter of the pump being 15 inches?

6.—How much power would it require to send 10,000 cubic feet of air per minute through an air-course having an area of 40 square feet, and how much would the power require to be increased to do it if the area of the air-course was only 20 square feet.

IRON AND STEEL.—Mr. A. G. HUNTER, of Flint, has patented some approximents in the manufacture of iron and steel, and in apparatus employed IRON AND STEEL.—Mr. A. G. HUNTER, of Flint, has patented some improvements in the manufacture of iron and steel, and in apparatus employed therefor. The features of novelty which constitute this invention are:—1. A closed chamber containing flues or pipes, substantially as and for the purposes described.—2. Deoxidising and heating towers, substantially as and for the purposes described.—3. Deoxidation by carburetted hydrogen, substantially as and for the purposes described.—4. The system of hot pressing the deoxidised ore into blooms, substantially as and for the purposes described.—5. The system of cold pressing the deoxidised ore into blooms, substantially as and for the purposes described.—6. Utilising the carbonic oxide evolved from the reduction of iron cres by carbon, as a source of fuel to assist in maintaining the temperature necessary for reducing such ores.

such ores.

NEW FURNACE,—Mr. CHARLES BAYLISS, of Pittsburgh, has invented an apparatus which he has named the "Siberian Combined Furnace," which is thus described—It is called a combined furnace, because it contains melting, in one apparatus, all heated from the fining, and puddling chambers, substantially, in one apparatus, all heated from the aame source of heat. It has no grate, but a blast device, and can be worked with either solid, liquid, or gaseous fuel. The mode of operation is to charge the hearth with coal and turn on the blast; the melting part gets hot in a very short time, the with coal and turn on the blast; the melting part gets hot in a very short time, the rice is then charged. When all is melted it is tapped and run into the fining chamics in the charged and melted in the same way. When the iron is sufficient

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ciently fined it is run into the third chamber, and puddled and drawn in the usual way. The furnace is capable of producing 50 tons per week, and its advantages may be briefly stated thus—It saves coal, because having no grate it makes no sakes, and the waste heat escaping from the melting of one charge is utilised in puddling another, so that the two operations go on simultaneously. Another source of economy in fuel is the intense heat generated by the combustion of the graphite in the iron when being fined by the air. It saves fixing, because fined metal does not scour, and furnaces in which it is worked do not require fixing. It reduces the labour of the puddler, as he will not have to fire, charge, melt, clean the grate, nor fix his furnace—fron Age.

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Messrs. NICHOLSON and MILNE, King-street, Manchester.

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Major MONKS, Durham (Chairman of the Teesdale Mining Com-

Major MONKS, Durnam (Chairman of the Teesdate Strining Company, Limited).

JAMES SNOWBALL, Esq., Gateshead, Coalowner.

JAMES OLIVER, Esq., C.E., Newcastle-upon-Tyne.

MR. ROBERT WIGHT, Engineer, Killingworth Colliery.

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CONSULTING MINING ENGINEER.
Mr. WM. VIPOND, Nether Hurth, near Alston, Cumberland.
MINE AGENT.
Mr. JOSEPH PHILLIPS, Harwood, Teesdale (late Agent at the Creetown and Champion Mines, Greetown, South of Scotland).
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This company is formed for the purpose of acquiring the lease of certain mining ground, situate in Teesdale, in the country of Durham, and working the same. The property is of triangular shape, with sides of above one mile each, one of which adjoins the celebrated Green Hurth Mine, which forms the north boundary, mother is bounded by the River Tees, and the third adjoins other mining ground which is not at present worked.

The Green Hurth Mine, with a capital expenditure of 6s, per share, has, during the fast three years, paid upwards of 400 per cent. in dividends, and the shares are cent as 610 as a cach. The north and south vein, which has been so profitable, runs habith is mine, widening as it goes, and at present produces about 10 tons of ore prathom. The workings extend to within 800 fashoms of this property, and, if the vein continues in its present direction, will run through it for a distance of 80 yards.

Other powerful north and south veins now being worked in Green Hurth Mine mainto this property.

the rein continues in its present direction, will run through it for a distance of 80 yards.

Other powerful north and south veins now being worked in Green Hurth Mine mainto this property.

This mine contains also a very powerful east and west vein, well known in the listrict as Dubby Syke Vein, which was considered the richest until the discovery die Green Hurth Vein, it extends through about 2000 yards of this ground, but 40 years ago it was worked by a few men on their own account by means of target with the discovery makes workings, but owing to troubles with water, and the difficulty and cost of saveying the ore to market, where it brought less than half its present price, they were compelled to abandon it.

During the years 1820 to 1833 the best lead ore in this or the Alston Moor distinction of the state of Green Hurth ore on Nov. 13, 1874, was at £5 15s. 6d. per bing. Since hea, three levels have been driven on the above vein, which can be worked by dis, as the property has a considerable slope towards the River Trees. At the point were those rich veins, Dubby Syke and Green Hurth veins, intersect it is expected that targe masses of ore will be found. Nothing has yet been done to prove & reins at these points of intersection. The property is very rich in sulphate of stryes, of which several thousand tons are at bank, and can be sold at considerable wire, it crushing mills were erected on the river side this mineral would alone privile a large revenue.

Ample water-power exists on the ground, and a road, now partly formed, will fee easy access to the railway stations at the towns of Alston or Middleton-inlessia, when the distance from this mine to Alston Station will be 12 miles, or Middleton-in-Teesdale II miles.

The purchase-money is fixed at £4000, £2000 in cash and £2000 in fully paid-up fare, which with a further sum of £500 already expended in road-making, plant, als, driving levels, and opening out of the ground, &c., will leave £5500 as work-ke piles and the property will reverse the event of t

be epital.

The vendor agrees to complete the road to the mine (nearly two miles), and to be vendor agrees to complete the road to the mine (nearly two miles), and to be a dependent of the company agreeing to sink a shaft, at or near the intersection of seren Hurth No. 1 Vein with the Dubby Syke Vein, as advised by Mr. Vipond, was to vein sproved in it.

There no allotment is made the deposits will be returned in full, and should a sea number of shares be allotted than are applied for, the balance of the deposit will be retained against the payment on allotment. Acopy of the Mermoandum and Articles of Association of the company can be appeted by any intending shareholder, at the offices of the company's solicitors, the offices of the company's solicitors, the offices of the company's solicitors, when the company's brokers, Messrs. Spence and Irwin, 67, Grey-street,

e, Shipley, and Hoyle, Collingwood-street, Newcastle-upon-Tyne; or of the company's brokers, Messrs. Spence and Irwin, 67, Grey-street,

offices of the company's brokers, Messrs. Spence and Arm., or, and con-fyne.

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and forms of Application, can be obtained at fixes of the company, No. 25, and on-fyne.

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At the Patent Office, 6, Lord-street, Liverpool.

The Manual is a very valuable one, and gives evidence of having been prepare a much care, and a thorough knowledge of the subject."—Mixing Journal.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the CARZISE MINING COMPANY.—Notice is hereby given, that ALL CREDITORS OF THE ABOVE-NAMED COMPANY are required, on or before the 19th day of December instant. TO SEND IN THEIR NAMES AND ADDRESSES, and the AMOUNTS AND PARTICULARS OF THEIR SEVERAL CLAIMS, to Mr. John Henry Hamley, the Official Liquidator of the said company, at the Stannaries Court Office, in Truc.

PREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, the 8th day of December, 1874.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

In the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the CARZISE MINING COMPANY.—The Vice-Warden has, by an Order made in the said Matter, bearing date the 5th day of December Instant, appointed JOHN HENRY HAMLEY, of Truro, within the said Stannaries, an Officer of the said Court, to be the Official Liquidator of the said company.

FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, the 8th day of December, 1874.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL OSBORNE MINING COMPANY.—The Vice Warden has, by an Order made in the above Matter, bearing date the 5th day of December instant, appointed CHARLES WILLIAM CLINTON, of Truro, within the said Stannaries, an Officer of the said Court, to be Official Liquidator of the above-named company. FREDERICK MARSHALL, Registrar. Dated Registrar's Office, Truro, December 8th, 1874.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL OSBORNE MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are required, on or before the 19th day of December instant. TO SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS, to Mr. CHAELES WILLIAM CLINTON, the Official Liquidator of the said company, at the Stannaries Court Office, in Truro, within the said Stannaries.

BREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, December 8th, 1874.

VALUABLE IRON, TIN, AND COPPER MINES IN WEST CORNWALL FOR SALE.

WEST CORNWALL FOR SALE.

MR. JOHN MATHEWS WILL SELI, BY AUCTION, at the Western Hotel, Pensance, on Thursday, the 17th day of December next, at Three c'clock in the afternoon, in One Lot, as a going concern, the WHOLE of the MACHINERY and MATERIALS, together with the SEVERAL MINING LEASES or SETTS of the TREBARVAH MINES, situate in the parish of Perranuthnoc, near Marazion.

The MACHINERY comprises the following, namely:—48½ in. cylinder, 7 ft. stroke PUMPING ENGINE, with 12 ton BOILER; 16 in. cylinder, 4 ft. stroke STEAM WHIM, with 8 ton BOILER; cage and wire-rope complete; shears and capstan, with wire-rope; 50 fms. 14 in. pitwork, and 15 fms. 7 in. in engine-shaft, with 10 fms. 12 in. pitwork in Richards' shaft, with 40 fms. flat-rods underground and 12 fms. 13 in. pumps at surface: skip-road in Richards' shaft, with stands, shleves, and shaft tackles at surface; together with a variety of miscellaneous articles. There is also an excellent account-house, together with smiths' shop and carpenters' shop, as well as material, powder, and dressing houses, with extensive The whole of the machinery is in first-rate condition, and ready to be set to work at once.

at once.
The various levels from the adit to the 60 have been cleared, and 117 tons of copper ore, 1300 tons of white spathose iron ore, and 298 tons of tinstuff have been raised to surface and sold. There is a good lode of copper ore now standing above the 60, west of Richard's shaft, and copper may also be expected in the 50 by driving a few fathoms further west of engine-shaft. There are several other valuable lodes known to exist in the sett.

Any further information may be obtained from Messrs. Branson and Son, solicitors, Sheffield; Mr. S. H. F. Cox, St. Columb; of the Auctioneer; or at the offices of Mr. W. TrayThall, Solicitor, Penzance.

Dated 16th November, 1874.

PRELIMINARY ADVERTISEMENT.

MESSRS. JOHN LEES AND CO. beg to announce that they have received instructions to CATALOGUE and PREPARE FOR SALE the WHOLE of the

VALUABLE MINING PLANT AND MACHINERY
Of the GREAT MONA MINE, situate in the parish of Maughold, in the Isle of
Man, particulars of which will appear in future advertisements.

Auctioneer's Offices, 86, London Wall, London, E.C.; and
Bt. James's Chambers, South King-street, Manchester.

TREBARVAH IRON, TIN, AND COPPER MINES.

NOTICE IS HEREBY GIVEN, that the SALE of the ABOVE MINES, with the MACHINERY and MATERIALS thereon, and the MINING SETTS, as a going concern, is unavoidably POSTPONED from the 17th December instant to the 31st December, at the Western Hotel, Penzance, at Four o'clock.

WM. TRYTHALL, Solicitor, Penzance.

Dated 3rd December, 1874.

A VALUABLE COPPER MINE FOR SALE.

THE PROPERTY IS IN FULL WORKING ORDER, WITH
A LARGE QUANTITY OF ORE EXPOSED FOR IMMEDIATE THE PROPERTY IS IN FULL WORKING ORDER, WITH A LARGE QUANTITY OF ORE EXPOSED FOR IMMEDIATE STOPING.

The SETT contains about SIXTY ACRES, held on lease having 38 years unexpired, direct from the freeholder, at a royalty of 1-16th dead rents, which merge into the royalty, £25 per annum for next three years, £50 per annum for the remainder of the term). The vendors obtained the lease with a view to proving and opening the property for working by a ilmited company. This has been accomplished, and the necessary plant and machinery have been laid down. A consider able quantity of ore, dressed and undressed, raised in opening the works, is on the banks, and on taking possession large quantities of ore can be raised. There is a good turnpike road running through the property, which is within 1½ mile of a terminal station on the London and North-Western Railway. Price £10,000; plant and machinery at a valuation.

The reports on the property, which induced the vendors to take it up, together with a plan of the workings and full particulars, can be seen on application to Messrs. Venton, Bull, and Cooper, 35, Old Jewry, London, E.C.

FOR SALE, BY PRIVATE TREATY,

GLAMORGANSHIRE, SOUTH WALES VALUABLE FREEHOLD MINERAL PROPERTY.

PROPERTY.

OR SALE, BY PRIVATE TREATY, a VALUABLE FREEHOLD

MINERAL PROPERTY, situate near SWANSEA, containing 273 ACRES, or thereabouts, and in easy communication with the large shipping port of Swansea, both by railway and canal.

The property contains VALUABLE SEAMS and VEINS of COAL and other MINERALS, and such surface rights as may be necessary will be given to the purchaser. If required, a further adjoining property, of about 250 acres, might be obtained upon lease on favourable terms.

For further particulars, apply to James Kempthorne, Esq., Solicitor, Neath.

TO CAPITALISTS. TO CAPITALISTS.

1340 ACRES TIN LANDS,—Lode and Stream.
2430 ACRES COPPER LANDS (portions freehold).
2112 ACRES IRON AND COAL.
2250. ACRES COAL (inland, on railway line).
200 ACRES COAL (inland, on railway line).
200 ACRES ELUMBAGO.
105 ACRES FREEHOLD GOLD DEPOSIT (Brown's Creek).

The above properties are all first-class, and on or near railway lines or water carriage, and are the very "pick" of their respective districts (being some of the first selections made).

Liberal terms, either as to purchase or working on royalty, will be given to

out arrangements. Apply to the owner,—CHARLES W. WEEKES, Circular Quay, Sydney, N.S.W.

POR SALE, a STEAM WINCH, on bogie, double 8-inch

oscillating cylinders, almost new.

Another STEAM WINCH, with double 7-inch cylinders.

A FLY-WHEEL, 19½ ft. diameter, weighing 12 tons.

The whole of the above are in splendid condition, and ready for inclivery. They are SECOND-HAND, and will be SOLD CHEAP,

Apply to John Hughes and Co., Padeswood, near Mold.

CORNISH PUMPING ENGINES.

TOR SALE, a very good second-hand 50 in. cylinder PUMPING ENGINE, 10 tt. stroke, with TWO CORNISH BOILERS and FITTINGS, 11 tons each; condensing work equal to new.

Also TWO very good 36 in. cylinder PUMPING ENGINES, with or without BOILERS.

Apply to F. W. MICHELL and Co., East Cara Brea, Redruth, Cornwall.

PIT SINKING AND WINDING COAL. FOR SALE, and ready for immediate delivery, a 14, 18, 25, and 35 horse power PORTABLE STEAM ENGINES, with link motion, reversing gear, winding drum, gear, &c., complete.

Also, a 9 and 18 horse power VERTICAL ENGINES, with link motion reversing

gear, suitable for mining operations.
FOR SALE,—An excellent FORTABLE STEAM ENGINE; and a 1-ft, PAN MORTAE MILL.
Apply to— BARROWS AND STEWARTS, ENGINEERS, BANBURY.

LEAD MINING PROPERTY.

THE ADVERTISER is OPEN to SELIL or JOIN in the PROMOTION of a COMPANY for WORKING a DESIRABLE PIECE of MINING GROUND, only partially developed, which has produced many hundred tons of SILVER-LEAD ORE. Locality good, lodes being those of the Lisburne Mines, and almost the nearest parallel ones to Grogwinion lodes. For particulars as to machinery, &c., apply to "Miner," Post Office, Aberystwith.

A GOOD INVESTMENT.

PARTNERSHIP WANTED in an OLD-ESTABLISHED FOUNDRY in the WEST OF ENGLAND, doing a good and profitable business, which may be increased to a very large extent on the introduction of more espital; 80 to 100 men might be employed in the present buildings. The machinery is in good working order, driven by water power, and capable of machinery is in good working order, driven by water power, and capable of manufacturing a 60-inch engine and other heavy work.

The premises are alongside a tidal river, and barges of 30 tons can discharge in front of the foundry. There is also a wharf adjoining, extensive enough to earry on a large general trade in timber, coal, iron and ship-building, and water-power for driving saw or bone mills.

Application to be made, not later than the lat of Investigation to be made, not later than the lat of Investigation to be made, not later than the lat of Investigation to be made, not later than the lat of Investigation to be made, not later than the lat of Investigation to be made, not later than the lat of Investigation to be made, not later than the later t

Application to be made, not later than the 1st of January next, to "A. B. C.."
MINING JOURNAL Office, 26, Fleet-street, London.

RONSTONE.—ABOUT TWO HUNDRED AND NINETY ACRES may be LEASED, or probably PURCHASED at once. No agents need apply. For particulars, write to Miss Peinson, Pickering.

SWEDISH AND SCOTCH PIT PROPS, MINING TIMBER. LARCH AND FIR CREOSOTED SLEEPERS,
LARCH AND FIR TRAMS, DEALS, &c., of all kinds and dimensions,

of best quality and lowest prices—FOR SALE.
THOMAS ATKINSON,

Apply to— THOMAS ATKINSON,

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(LIMITED).
FOR SALE, TWENTY-FIVE £5 SHARES (£4 10s. paid).

KILLAN AND THREE CROSSES COLLIERY COMPANY (LIMITED).

FOR SALE, TWENTY-FIVE £5 SHARES (£3 10s. paid).

Secretary-F. WARWICK, 25, Bucklersbury, London.

No reasonable offer refused. Address, F. G. FLINN, Handsworth, Birmingham.

ECOND-HAND BEAM STEAM ENGINE FOR SALE.—
Has indicated 230-horse power; principal dimensions -7 ft. stroke, 46½ in. eylinder, jacketted D valves, iv. wheel 28 ft. diameter weighing 16 tons. Total weight about 50 tons. The Ashlar foundations also to be disposed of.
The engine can be seen working on application to GEO. LEACH, Britannia Mills, near Railway Termini, Lecds.

MINING MACHINERY AND MATERIALS FOR SALE, comprising STEAM ENGINES, WATER WHEELS, PITWORK, and other MINE MATERIAL.—Apply to—
W TREGAY, REDRUTH.

TOR SALE, a HORIZONTAL HIGH-PRESSURE ENGINE, 13½ in. cylinder, 24 in. stroke; HORIZONTAL HIGH-PRESSURE ENGINE, 14 in. cylinder, 30 in. stroke; and a PAIR of GUN-METAL PUMPS, 6 In. diameter, 12 in. stroke; also, a TUBULAR BOILER, up to 60-horse power, of Yorkshire plates throughout.

Apply to W. T. HENDRY and Co., 2, Wilson-street, London E.C.

FOR SALE, CORNISH ROTARY ENGINE, 38 in. cylinder, two fly wheels, about 20 tons; TWO BOILERS, 20 tons; THREE STAMPS AXLES, five cams to the round, two sets complete, with lifters, &c., for stamping. To be sold together or separately.

Apply to Mr. HOWARD, Auctioneer, St. Columb, Cornwail.

FOR SALE (cheap), a WATER-WHEEL. 30 ft. diameter, with WINDING and PUMPING GEAR; also, SEVENTY FATHOMS of 1 in. diameter WIRE ROPE, &c., &c. All in first-class condition.

Apply to A. H. Kenbick, 13, Rumford-street, Liverpool.

ON SALE,—MASSIVE CRUSHING MILL, with two pairs of 24-in. rolls, in east metal frames.

Also, 250 yards of 1½ in. diameter IRON WIRE WINDING ROPE.

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ON SALE, TWO CORNISH BOILERS, 30 ft. by 7 ft. diameter.

Two flues through each. Safe at 60 lbs. pressure working.

Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE PAIR of 18 in. high pressure HORIZONTAL ENGINES, for winding, fitted with slot link motion. First-class pair of Apply to HENRY PARKINSON, Foundry street, Bolton.

ON SALE, ONE PAIR of 15 in. HORIZONTAL WINDING ENGINES, with slot link motion. Will be sold cheap.

Apply to HENRY PARKINSON, Foundry-street, Bolton.

N SALE, ONE 25-horse power double cylinder PORTABLE ENGINE, fitted with slot link motion for winding.
ONE 20-horse power double cylinder PORTABLE ENGINE.
Will be sold cheap, and are in first-class order.
Apply to Hanney Parkinson, Foundry-street Boiler Works, Bolton, Lancashire.

ON SALE, ONE 8-horse power PORTABLE ENGINE, fitted up with winding drum; slot link motion; made by Clayton and Shuttle-

up with winding drum; slot link motion; made worth. Price £130.
Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE PAIR of 25-in. coupled HORIZONTAL WIND-ing Engines, with drums and brake gear. Also, ONE PAIR of 22 in. Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE STRONG WELL-BUILT CONDENSING BEAM ENGINE, by a first-class maker, equal to new; cylinder, 36 in. bore, 5 ft. one consequence of the condense of t

DOLLERS ON SALE.—FOUR GALLOWAY'S PATENT BOILERS, 30 ft. by 7 ft., safe to work at 70 lbs. on the square inch.
TWO BOILERS, 28 ft. by 7 ft., with two flues through.
TWO BOILERS, 28 ft. by 7 ft., two flues through.
ONE BOILERS, 20 ft. by 7 ft., two flues through.
ONE BOILER, 20 ft. by 6 ft. one flue through.
ONE BOILER, 18 ft. by 6 ft. one flue through.
Apply to Henry Parkinson, Foundry-street, Bolton.

ON SALE, ONE 16-horse power double cylinder PORTABLE ENGINE, for winding.
ONE 12-horse power PORTABLE ENGINE.
ONE 10-horse power PORTABLE ENGINE.
ONE 8-horse power PORTABLE ENGINE.
ONE 6-horse power PORTABLE ENGINE.
Equal to new, and will be sold cheap.
Apply to Henry Parkinson, Foundry-street, Bolton.

ON SALE, ONE PAIR of 25-in, HORIZONTAL WINDIN

N SALE, ONE TAN ME SALE, ONE TAN ME SALE, ONE PAIR of 18 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 16 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 15 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 12 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 10 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 7 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 7 in. HORIZONTAL WINDING ENGINES.
The above engines are now ready for delivery, and fixted with winding drums and brake gear to each pair of engines.

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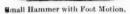
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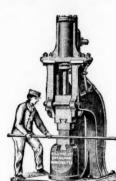
& S. MASSEY, OPENSHAW, MANCHEST

PRIZE MEDALS AWARDED:-Paris, 1867 Havre, 1868; Highland Society, 1870; Liverpool, 1871; Moscow, 1872; Vienna, 1873.

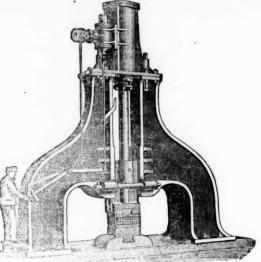
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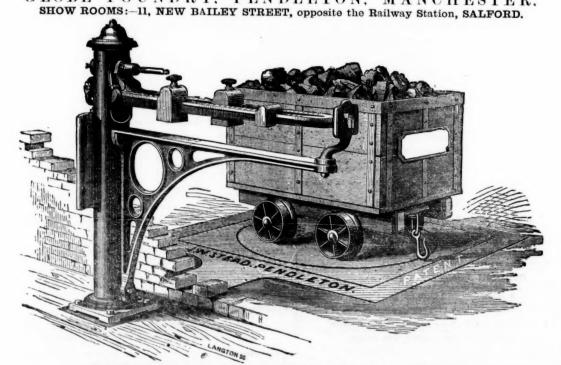
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NEW PATENT WEIGHING MACHINES, specially for Mining Uses. Globe Foundry is One Minute's Walk from the Pendleton 'Bus Office, and Four Minutes' from Pendleton Rauway Station.

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This company grant licenses, under their patents, for the use, singly or incompanion, of the most approved machinery for dressing ores, comprising Stamps Jiggers, Classifiers, and Buddles.

Jiggers, Classifiers, and Buddles.

R. GEORGE GREEN, Mechanical Engineer to the above Company, SUPPLIES MACHINES under the above Company's Patents for DRESSING all METALLIC ORES. Dressing-floors having these Machines possess the following advantages:—

1.—They are cheaper than any other kind in first outlay.

2.—From 60 to 70 per cent. of the labour is saved.

3.—Only about one-fourth of the space usually occupied by dressing-floors is required.

4.—The ore is made clean at one operation, and 5 per cent. of ores otherwise lost is saved.

is saved.
Drawings, specifications, and estimates will be forwarded on application to— GEORGE GREEN, M.E., ABERYSTWITH, SOUTH WALES.

EXTRACTS FROM TESTIMONIALS RECEIVED :-

EXTRACTS FROM TESTIMONIALS RECEIVED:—

Mr. C. E. BAINBRIDGE, of the London Company's Mines, Middleton-in-Teesdale, by Darlington, writing on the 27th September, 1873, says—"After a full season's experience of the very complete Dressing Machine erected by you at our Colberry Mines, we are fully satisfied with our decision to adopt your patents in preference to all others. The machinery does its work as well as we can desire, and better than we anticipated. We are now getting through 70 tons of orestuff per day, of rich quality. Without your machinery we should have been at a stand still, for we cannot get hands to supply our wants elsewhere. It saves fully one-half of the old wages, and vastly more on the wages we now give, and the saving in ore is not much short of 10 per cent. You can quote from this letter as you think proper."

Mr. COLLELS DODSWORTH of Haydon Bridge writes on the 15th

think proper."

Mr. COULTAS DODSWORTH, of Haydon Bridge, writes, on the 15th January, 1874:—"I have just returned from the Stonecroft and Greyside Mines, where I have seen your 'Patent Ore Dressing Machinery' at work, with which I must say, I was highly pleased. It is decidedly the best machinery I have ever seen for the purpose, the results being as near perfection as possible, and I am quite sure its use in this case will be a very great saving to the company. No large mining establishment should be without your machinery, especially when labour is difficult to procure—a mere fraction of the hands being only required as against the old system, and the work all ogether much better done, and a great saving of ore effected. I have heard it said that your machinery is better adapted for post than for rich ores, but from what I have seen to-day I an quite confident it will do for any kind of ores. I beg not only to congratulate, but also to compliment, you on this great success of your. 'Patent Ore Dressing Machinery.' You may use this letter as you think proper.'

Mr. MONTAGUE BEALE. Managing Director of the Carliara Mining

this letter as you think proper."

Mr. MONTAGUE BEALE, Managing Director of the Cagliara Mining Company (Limited), says, on May 15th, 1873:—"I have much pleasure in speaking of the great efficiency of your "Patent Dressine Machinery," as erected by you at our mines at Rosas, in the Island of Sardinia. You will remember it has always been considered impossible to dress, or rather separate, the minerals our ores contain by machinery, but our esptain assures me he gets a constant return of 76 per cent. of lead with the greatest ease, and I know by the returns we are realising the best market price. I consider this company is much indebted to you for the success you have achieved at so small cost. It may interest you to know, from my experience in several of the British possessions, including the whole of the Australian Colonies, that my opinion is I have never seen any dressing machinery that can efficiently, and at so small a cost, dress, and separate metallic ores, however obset the mechanical mixture may be, as yours. You can use this letter in any way you like."

The most satisfactory testimonials also have been received from the GREENSIDE MINE COMPANY, Westmoreland: the TALARGOCH MINING COMPANY, North Wales, and others. Copies of these may be had from Mr. GREEN.

JOHN AND EDWIN WRIGHT,

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(ESTABLISHED 1770.) (ESTABLISHED 1770.)
MANUFACTURERS OF EVERY DESCRIPTION OF
IMPROVED
WIRE ROPES

PATENT FLAT AND ROUND WIRE ROPES,
From the very best quality of charcoal iron and steel wire.
PATENT FLAT AND ROUND HEMP ROPES, SHIPS RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CON-DUCTORS, STEAM PLOUGH ROPES (made from Wedster and Horsfall's patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE TARPAULING, OIL SHEETS, BRATTICE CLOTHS, &c.

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Invested assets
Annual income 4,594,552
Claims paid, with bonus additions. 2,585,415
Total bonuses declared to 1868 inclusive 2,585,415
Total expenditure 6 per cent. on total income for last five years.

Bonus, 1874.—Cash profits declared 883,083
Next division of profits, 1879.

"

" In order to participate at the next division of profits, policies must be effected
forms of Proposal and any further information may be obtained on application

JOHN RALPH GRIMES, Secretary.

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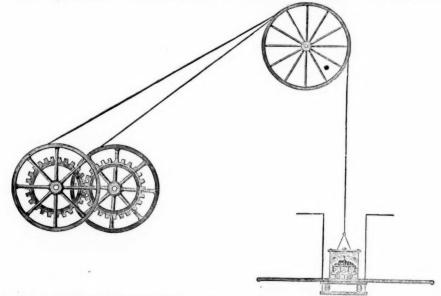
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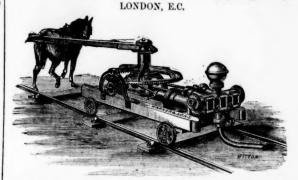
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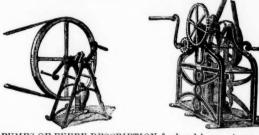
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